

# UNCLASSIFIED

AD NUMBER
AD832430
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Dec 1967. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505.
AUTHORITY
CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

AD832430

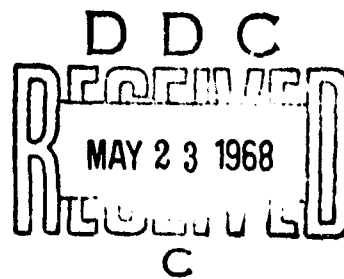
FOR OFFICIAL USE ONLY



# CONSOLIDATED TRANSLATION SURVEY

Number 120

Through 31 December 1967



STATEMENT #2 UNCLASSIFIED

This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of -----

CENTRAL INTELLIGENCE AGENCY

Washington, D.C. 20505

FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

FOR DECEMBER 1967

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Requests for Copies	iv
USSR	
Economic	1
Political	8
Military	8
Sociological	8
Eastern Europe	
Economic	9
Political	12
Military	13
Sociological	13
Western Europe	
Economic	13
Political	13
Military	14
Africa	
Economic	14
Political	15
Sociological	15
Middle East	
Economic	15
Political	16
Military	16
Sociological	16
Far East	
Economic	17
Political	17
Military	18
Sociological	18

	<u>Page</u>
Latin America	
Economic	19
Political	19
Sociological	20
Scientific	
Aeronautics	20
Agriculture	20
Atmospheric Sciences	21
Behavioral & Social Sciences	22
Biological & Medical Sciences	22
Chemistry	27
Earth Sciences & Oceanography	29
Electronics & Electrical Engineering	30
Energy Conversion (Non-Propulsive)	31
Materials	32
Mathematical Sciences	38
Mechanical, Industrial, Civil & Marine Engineering	38
Methods & Equipment	40
Navigation, Communications, Detection & Countermeasures	40
Nuclear Science & Technology	41
Physics	42
Space Technology	44
Miscellaneous	44
Information on Cover-To-Cover Translations	45
Index to Authors	85

## CONSOLIDATED TRANSLATION SURVEY

### PREFACE

This survey is prepared monthly from lists received through the cooperation of US government agencies and includes universities, research institutions, and commercial translation organizations. It is a compilation of projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.

Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (\*), and when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

Scientific and technical translations are grouped according to the COSATI subject category list except for military science and ordnance items which are listed under "military" in the appropriate geographic areas.

### REQUESTS FOR COPIES

Requests for copies of published projects should be made direct to the designated producing organization.

#### Addresses of Producers to Follow:

ACSI - (see DIA)

AEC - Atomic Energy Commission (see CFSTI)

AFCRL Res Lib

Air Force Cambridge Research Laboratories  
Research Library  
Office of Aerospace Research  
United States Air Force  
Bedford, Massachusetts  
ATTN: CRXLR

AGU

American Geophysical Union  
1515 Massachusetts Avenue, NW  
Washington, D. C. 20005

AIP

American Institute of Physics  
335 East 45th Street  
New York, New York 10017

BISI

British Iron and Steel Industry Translation Service  
The Iron and Steel Institute  
4 Grosvenor Gardens  
London, S.W. 1, England

CB

Consultants Bureau Enterprises, Incorporated  
227 West 17th Street  
New York, New York 10011

CFSTI

Clearinghouse for Federal Scientific and  
Technical Information (Formerly Office of  
Technical Services)  
Port Royal and Braddock Roads  
Springfield, Virginia 22151

DIA

Defense Intelligence Agency  
Washington, D. C. 20301

Emmanuel Coll Res Lang Ctr

Emmanuel College Research Language Center  
The Fenway  
Boston, Massachusetts

EP Inc.

The Paraday Press, Incorporated  
84 Fifth Avenue  
New York, New York 10011

HB

Henry Bratcher Technical Translations  
P.O. Box 157  
Altadena, California 91001

IEEE

Institute of Electrical and Electronics Engineers  
275 Madison Avenue  
New York, New York 10016

Department of Interior

Department of Interior , Room 8015  
Branch of Foreign Fisheries (Translations)  
Division of International Affairs  
Bureau of Commercial Fisheries  
Washington, D. C. 20240

JPRS

U. S. Department of Commerce  
Clearinghouse for Federal Scientific  
and Technical Information  
Joint Publications Research Service  
Building Tempo I,  
East Adams Drive, 4th & 6th Streets, SW  
Washington, D. C. 20443

NASA

National Aeronautics and Space Administration  
1512 H Streets, NW  
Washington, D. C. 20546

Navy

Department of Navy  
Office of Naval Intelligence  
Washington, D. C.

NLL

National Lending Library  
For Science & Technology  
Boston Spa, Yorkshire, England

NRL

U. S. Naval Research Laboratory  
Washington, D. C. 20390

NSTIC

Naval Sci and Tech Intell Ctr

Ministry of Defense  
Room 102, Station Square House  
St. Mary Cray, Orpington, Kent  
England

ONI - Office of Naval Intelligence (see Navy)

ORNL - Oak Ridge National Laboratory (see AEC)

OSA

Optical Society of America, Incorporated  
33 University Road  
Cambridge, Massachusetts 02138

PG

Petroleum Geology  
BOX 171  
McLean, Virginia

Sci & Tech Info Facility

Scientific & Technical Information Facility  
National Aeronautics and Space Administration  
Goddard Space Flight Center  
Contract No NAS-5-12487

SIC

Scientific Information Consultants, Limited  
661 Fenchley Road  
London N.W. 2, England



TIL - Technical Information Library

Ministry of Aviation  
TIL, 1 (b)  
Leysdown Road  
Nottingham  
London, S.E. 9, England

UCRL

University of California  
Lawrence Radiation Laboratory  
Livermore, California  
(see AEC)

USSR

Economic

New Wholesale Prices Reflected in the Economic Reform, 5 pp.  
RUSSIAN, per, Agitator, No 16, Aug 1967, pp 20-22.  
JPRS 43208

Production Planning for Nonstandard Equipment in Capital Construction, 5 pp.  
RUSSIAN, per, Byulleten' Stroitel'noy Tekhniki, No 8, Aug 1967, pp 7-9.  
JPRS 43082

Operations of Main Leningrad Construction Administration, by I. N. Kugushev, 8 pp.  
RUSSIAN, per, Byulleten' Stroitel'noy Tekhniki, No 8, Aug 1967, pp 20-23.  
JPRS 43082

More Attention to Economy in Construction Design, by R. G. Shishkin, 5 pp.  
RUSSIAN, per, Byulleten' Stroitel'noy Tekhniki, No 8, Aug 1967, pp 28-29.  
JPRS 43082

Recent Work of USSR State Committee on Construction, 5 pp.  
RUSSIAN, per, Byulleten' Stroitel'noy Tekhniki, No 8, Aug 1967, pp 30-31.  
JPRS 43082

Credit and Settlement of Accounts in Industry, by M. Ingberman, 18 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1967.  
JPRS 43195

Operation of Savings Banks, by T. Shikharev, 11 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1966, pp 26-32.  
JPRS 43195

Development of the State Bank of the USSR, by M. Khlynov, 18 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1967, pp 33-43.  
JPRS 43195

USSR  
Economic (Contd)

Providing Credit for Enterprises in the Food Industry, by P. Beyzer and I Gak, 5 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1967, pp 48-50.  
JPRS 43180

Domestic Services in Latvia, by P. Koreshev, 5 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1967, pp 53-56.  
JPRS 43195

Control Over Expenditure of Wage Funds, 13 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1967, pp 67-72.  
JPRS 43195

International Bank of Socialist Countries, by L. Kadyshchev and L. Sulyayeva, 6 pp.  
RUSSIAN, per, Den'gi i Kredit, No 8, 1967, pp 92-94.  
JPRS 43195

Gains in 5500 Enterprises Operating Under Economic Reform, by N. Drogichinskiy, 5 pp.  
RUSSIAN, per, Ekonomicheskaya Gazeta, no 35, Aug 1967, p 9.  
JPRS 43127

Economic Reform Affects Saransk Association, by I. Kovalenko, 6 pp.  
RUSSIAN, per, Ekonomicheskaya gazeta, No 36, Sept 1967, p. 11.  
JPRS 43022

Bonus System for Railway Workers Explained, 5 pp.  
RUSSIAN, per, Ekonomicheskaya gazeta, No 38, Sept 1967, p. 13.  
JPRS 43021

Development of Trade under Present-Day Conditions, by V. D'yakov, 9 pp.  
RUSSIAN, per, Ekonomicheskaya Gazeta, No 38, 1967, pp 18-19.  
JPRS 43081

Agricultural Staffing Problems, by I. Zmlyanov, 5pp.  
RUSSIAN, per, Ekonomicheskaya Gazeta, No 38, Sep 1967, p 35.  
JPRS 43231

USSR  
Economic (Contd)

Role of Capital Payment in New Economic System,  
by A. Gusev, 12 pp.  
RUSSIAN, np, Ekonomicheskaya gazeta, No 39, Sept  
1967, pp 14-15.  
JPRS 43199

Deputy Chairman of State Supply Committee Com-  
ments on Problems in Industrial Supply, by  
V. M. Lagutkin, 8 pp.  
RUSSIAN, np, Ekonomicheskaya gazeta, No 39, Sept  
1967, p 21.  
JPRS 43199

Sugar Industry Workers Appeal for More  
Machinery, 9 pp.  
RUSSIAN, per, Ekonomicheskaya gazeta, No 39, Sept  
1966, pp 40-41.  
JPRS 43210

Ukrainian Hosiery Combine Proposes Individual  
Bonus Regulations, by M. Dolgiy, 5 pp.  
RUSSIAN, np, Ekonomicheskaya gazeta, No 40,  
Oct 1967, p 14.  
JPRS 43189

Incentive Funds Set Up At a Research Institute  
6 pp.  
RUSSIAN, np, Ekonomicheskaya gazeta, No 40,  
Oct 1967, p 28.  
JPRS 43189

Sugar Industry to Convert to New System, by V.  
Grechukhin, 5 pp.  
RUSSIAN, per, Ekonomicheskaya gazeta, No 40,  
Oct 1967, p 30.  
JPRS 43142

Agricultural Development Reviewed, 6 pp.  
RUSSIAN, per, Ekonomicheskaya gazeta, No 40,  
Oct 1967, p 34.  
JPRS 43231

Poor Personnel Scheduling in Lithuanian  
Retail Trade, by Z. Vil'nik, 5 pp.  
RUSSIAN, np, Ekonomicheskaya gazeta, No 40,  
Oct 1967, p 42.  
JPRS 43189

Survey of the Economy of the Georgian SSR,  
by G. Chogovadze, 5 pp.  
RUSSIAN, np, Ekonomicheskaya gazeta, No 42,  
Oct 1962, p. 22.  
JPRS 43209

USSR  
Economic (Contd)

Tasks and Methods of Optimal Planning, by  
Nikolay Prokof'yevich Fedorenko, 63 pp.  
RUSSIAN, bk, Ekonomika i matematika, 1967,  
pp 15-85.  
JPRS 43209

Urban Development and Progress in Ukrainian  
Cities, by I. Starovoytenko, 10 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No  
8, Aug 1967, pp 19-26.  
JPRS 43246

Criticism of Norm Standards at Kiev Plants, by  
A. Borodkin, 6 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No  
8, Aug 1967, pp 41-46.  
JPRS 43246

New Technology Needed for Ukrainian Machine-  
Building Enterprises, by V. Tsmel' and K.  
Mazanov, 9 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No  
8, Aug 1967, pp 47-54.  
JPRS 43246

Changes Urged in the Structure of Public  
Catering Services, by A. Ivanov, 7 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy,  
No 8, Aug 1967, pp 73-77.  
JPRS 43210

Problems of Developing Southwestern Economic  
Region of the USSR, by B. Valuyev, 8 pp.  
RUSSIAN, per, Ekonomika Sovetskoy Ukrainy, No  
8, Aug 1967, pp 87-94.  
JPRS 43246

Economic Reform in Uzbekistan, 7 pp.  
RUSSIAN, per, Ekonomika i Zhizn', No 7, 1967,  
pp 8-11.  
JPRS 43208

Urge Better Coordination between Local and  
Republic Planning Organs, by S. Akhmedov, 5 pp.  
RUSSIAN, per, Ekonomika i Zhizn', No 7, 1967,  
pp 23-25.  
JPRS 43208

Uzbekistan Retail Trade Needs Boost, by S.  
Aminov, 6 pp.  
RUSSIAN, per, Ekonomika i Zhizn', No 7, Jul  
1967, pp 87-89.  
JPRS 43142

USSR  
Economic (Contd)

Strengthen Financial Control over the Production and Sale of Consumer Goods, by P. Os'kin, 11 pp.  
RUSSIAN, per, Finansy SSR, No 8, Aug 1967, pp 9-15.  
JPRS 43180

Problems of Ocean Productivity, by V. G. Bogorov.  
RUSSIAN, per, Gidrobiologicheskii Zhurnal, Vol 3, No 5, 1967, pp 12-21.  
\*Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Geographical Bases of Prospects for Fishing in the World Ocean, by T. S. Rass.  
RUSSIAN, per, Gidrobiologicheskii Zhurnal, Vol 3, No 5, 1967, pp 22-31.  
\*Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Economic Reform in Operation, by N. V. Delektorskiy and N. M. Shmakov, 11 pp.  
RUSSIAN, per, Khimikofarmatsevticheskii Zhurnal, No 8, Aug 1967, pp 3-8.  
JPRS 43284

Rapid Growth of Armenian Industry under Soviet Rule, 5 pp.  
RUSSIAN, np, Kommunist, 10 Oct 1967, p. 2.  
JPRS 43209

Local Industry in Uzbek SSR to Expand Production, by A. Abdurakhmanov, 8 pp.  
RUSSIAN, per, Kommunist Uzbekistan, No 9, Sept 1967, pp 39-44.  
JPRS 43210

Analysis of Results of Economic Reform in Machine Building Industry, by A. V. Arkhipov and F. V. Kasatkin, 5 pp.  
RUSSIAN, per, Mashinostroeniye, No 8, Aug 1967, pp 4-5.  
JPRS 43208

Economic Reform, Material and Technical Supply, by N. Drogichenskiy, 9 pp.  
RUSSIAN, per, Material'no-Tekhnicheskoye Snabzheniye, No 8, Aug 1967, pp 1-7.  
JPRS 43208

USSR  
Economic (Contd)

The Planning, Supply, and Rhythm of Production, by A. Zakrzhnyy, 8 pp.  
RUSSIAN, per, Material'no-Tekhnicheskoye Snabzheniye, No 8, Aug 1967, pp 11-17.  
JPRS 43208

The Mutual Relations of Enterprises-Suppliers and Supply-Marketing Organizations, by I. Korobkov, 8 pp.  
RUSSIAN, per, Material'no-Tekhnicheskoye Snabzheniye, No 8, Aug 1967, pp 17-22.  
JPRS 43208

Increasing Supply System Economy, by Kh. Khalvashi, 7 pp.  
RUSSIAN, per, Material'no-Tekhnicheskoye Snabzheniye, No 8, Aug 1967, pp 22-27.  
JPRS 43208

The New Supply System Gains Strength, by M. Zemlyanskiy, 11 pp.  
RUSSIAN, per, Material'no-Tekhnicheskoye Snabzheniye, No 8, Aug 1967, pp 56-62.  
JPRS 43208

The New System of Planning and Economic Stimulation, 14 pp.  
RUSSIAN, per, Material'no-Tekhnicheskoye Snabzheniye, Aug 1967, No 8, pp 83-89.  
JPRS 43208

Steel Production Questions Discussed at the Plenum of the Central Committee of the Ukraine, 5 pp.  
RUSSIAN, per, Metallurgicheskaya i Gornorudnaya Promyshlennost', No 4, 1967, pp 3-4.  
JPRS 43131

Increase Sought in Fleet Transport Capability, 6 pp.  
RUSSIAN, per, Morskoy Flot, Vol 25, No 12, Dec 1965, pp 1-2.  
JPRS 43050

Competition Results Cited by Water Transport Society, by V. Letunov, 5 pp.  
RUSSIAN, per, Morskoy Flot, No 2, Feb 1967, pp 42-43.  
JPRS 43050

USSR  
Economic (Contd)

Specific Program of Action for Implementing Decree on Further Development of Meat and Dairy Industry Base, by Ye. Birulya, 5 pp.  
RUSSIAN, per, Myasnaya Industriya USSR, No 9, Sept 1967, pp 1-4.  
JPRS 43180

Experiences of the 30,000 City Workers Sent to Kolkhozes in 1955, by A. P. Tyurina, 16 pp.  
RUSSIAN, per, Ot Oktyabrya k stroitel'stvu kommunizma, 1967.  
JPRS 43019

Armenian Plastics Processing Lags, by V. Khankal'yan, 5 pp.  
RUSSIAN, per, Promyshlennost' Armenii, No 6, June 1967, pp 15-17.  
JPRS 43211

Belorussian Export Trade Poorly Utilized, by O. I. Marov, 7 pp.  
RUSSIAN, per, Promyshlennost' Belorussii, No 9, Sept 1967, pp 18-19.  
JPRS 43199

Ukrainian Republic and Local Kiev Organs Urged to Assist in Eliminating Plurality in Jobs of City Salesmen, by V. Bogolyubov, 5 pp.  
RUSSIAN, mp, Rabochaya Gazeta, 10 Sept 1967, p 3.  
JPRS 43180

A New Book on Whaling Vessels, by A. A. Oliv.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 41, No 1, 1965, p 95.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

On the Effectiveness of Fishing and Processing the Celosids in the System of the Sakhalin Fishing Industry, by K. V. Klimanova.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 41, No 2, 1965 pp 81-82.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

USSR  
Economic (Contd)

On Methods of Harvesting Fur Seals, by V. A. Arsenov.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 41, No 9, 1965, pp 55-57; Vol 41, No 10, 1965, pp 50-52.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Trepang - a Valuable Sea Product, RUSSIAN, per, Rybnoe Khoziaistvo, Vol 42, No 1, p 10.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Shortcomings of Fishery Regulations Presently in Force, by G. G. Sibirtsev.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 42, No 1, pp 21-23.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Concentration of Processing in the Fishing Industry, by N. P. Syslov.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 42, No 1, 1966, pp 76-77.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Profit Measures for State and Kolkhoz Fishing, by N. A. Petrishchev.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 42, No 1, pp 78-79.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Books on the Fishing Industry in 1966, by M. A. Zarin.  
RUSSIAN, per, Rybnoe Khoziaistvo, Vol 42, No 1, pp 91-94.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

USSR  
Economic (Contd)

Resolutions of the September (1965) Plenum of the CC CPSU and the Transition to Economic Planning Methods in the Fishing Industry, by V. M. Kamentsev.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 2, pp 2-4.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Mobile (Floating) Unit for the Collection and Passage of Fish, by B. S. Malevanchik.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 2, pp 23-25.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

New Achievements of the Sakhalin Kolkhoz Fishermen, by A. Taranov.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 2, p 87.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Assistance Given to the Fish Industry by TINRO Scientists, by I. V. Kisevetter.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 4, 1966, pp 2-4.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

The Utilization of Mathematical Methods as a Scientific Basis for Planning the Long-Term Development of the Fishing Industry, by M. P. Moskalenko.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 5, 1966, pp 67-68.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Improvement of Salmon Breeding in the Lake Ladoga Basin, by D. K. Khalturin, Kh. A. Leiserovich.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 9, pp 10-11.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

USSR  
Economic (Contd)

Mathematical Problems of Planning in the Fish Industry, by M. P. Moskalenko.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 9, pp 86-89.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Hydrologic Construction in the Krasnoyarsk Territory and Its Importance to Fishery, by A. V. Podlesnyi.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 10, pp 28-30.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Some Remarks on Increasing Profits of Factory Ships, by V. Skorupskii.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 10, 1966, pp 38-39.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Preparation for the Transition to New Working Conditions, by E. A. Odinet.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 11, 1966, pp 69-70.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

The Application to Commercial Fishing of a Formula from the Mass-Maintenance Theory, by E. P. Novoskhilov.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 11, pp 82-83.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Technological Problems of Storing Fish in Refrigerated Seawater, by A. I. Piskarev.

RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 1, 1967, pp 60-62.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

USSR  
Economic (Contd)

Fishing News (Marketing).  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 1,  
1967, p 70.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Construction and Reconstruction.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 1,  
1967, p 80.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Bread Made From Fish Flour.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 2,  
p 53.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Testing Fish Pumps Produced by the (Japanese)  
firm "Hitachi", by V. F. Trofimov.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 2,  
pp 70-72.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Use of Electric Hand Carts, by N. Muratov.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 2,  
1967, p 88.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Vladivostok Fisheries Exhibition Sponsored by the  
Moscow Exhibition of the Achievements of the  
National Economy, by F. S. Garntsev.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 2,  
1967, p 93.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

The Use of Lacquered Chrome-Plated Tin in the  
Fish Canning Industry, by L. Ia. Val'ter.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 4,  
1967, pp 57-58.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

USSR  
Economic (Contd)

Personal Concern in Improving the Quality of  
Construction, by L. Pshonik, 8 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 8,  
Aug 1967, pp 25-29.  
JPRS 43189

Fulfillment of the Plan of the Enterprise and  
Material Incentives, by A. Milyukov, 15 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 8,  
Aug 1967, pp 30-39.  
JPRS 43189

Information for Workers of Enterprises on  
Practical Experience in Changing over to the  
New System of Planning and Economic Incentives,  
7 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud, No 8,  
Aug 1967, pp 47-50.  
JPRS 43189

Experience of Work in Conditions of the Five-  
Day Working Week, by G. Noda, 8 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud,  
No 8, Aug 1967, pp 59-63.  
JPRS 43189

The Method of Momentary Observations for  
Studying the Consumer Budgets of Families of  
Workers and Employees, by A. Karapetyan, N.  
Rimashevskaya, 9 pp.  
RUSSIAN, per, Sotsialisticheskiy Trud,  
No 8, Aug 1967, pp 126-131.  
JPRS 43189

Enterprise Directors Questioned on Results  
of Economic Reform, 21 pp.  
RUSSIAN, per, Sovetskoye Gosudarstvo i Pravo,  
No 9, Sep 1967, pp 76-89.  
JPRS 43127

Latvian Industry to Exploit Fishery Resources,  
by B. Shlimovich, 5 pp.  
RUSSIAN, per, Sovetskaya Latvija, 12 Oct 1967,  
p. 2.  
JPRS 43180

Five-Day Work Week Adopted by Latvian Consumer  
Cooperatives, by I. Drut, 5 pp.  
RUSSIAN, per, Sovetskaya Potrebitel'skaya  
Kooperatsiya, No 9, Sept 1967, pp 35-37.  
JPRS 43179

Economic Reform at Power and Electrical Engi-  
neering Enterprises, by V. Andreyev, 8 pp.  
RUSSIAN, per, Sovetskiye Profsoyuzy, No 14,  
July 1967, pp 3-7.  
JPRS 43083

USSR  
Economic (Contd)

Leningrad Enterprises Experiment with Improving Production Effectiveness, by V. Mikhaylov and A. Shcherbakov, 11 pp.  
RUSSIAN, per, Sovetskaya Rossiya, 30 Sept 1967, pp 2-3.  
JPRS 43199

Party Organizations in the Struggle for the Development of Trade, by R. Pruidze, 7 pp.  
RUSSIAN, per, Sovetskaya Torgovlya, No 9, 1967, pp 18-20.  
JPRS 43146

A Statistical Study of Consumer Demand, by N. Druzhinin, 9 pp.  
RUSSIAN, per, Sovetskaya Torgovlya, No 7, 1967, pp 29-33.  
JPRS 43146

Mechanization in Trade Organizations, by V. Kerzner, 9 pp.  
RUSSIAN, per, Sovetskaya Torgovlya, No 9, 1967, pp 50-53.  
JPRS 43146

Measures for the Development of Our Fisheries, by V. A. Kevdin.  
RUSSIAN, per, Sovremennoe Rybolovstvo Rossii, 1961, pp 112-145.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Efficiency Criteria for Using Computers, by B. I. Zubarev and V. N. Shprintsin, 6 pp.  
RUSSIAN, per, Standarty i Kachestvo, No 8, Aug 1967, pp 37-38.  
JPRS 43209

Review of Training of Agricultural Cadres During 50 Years of Soviet Power, 9 pp.  
RUSSIAN, per, Tekhnika v Sel'skom Khozyaystve, No 8, Aug 1967, pp 1-5.  
JPRS 43128

Modernization of Textile Equipment Outlined, by P. P. Kaminsky, 8 pp.  
RUSSIAN, per, Tekstil'naya Promyshlennost', No 8, Aug 1967, pp 34-36.  
JPRS 43142

USSR  
Economic (Contd)

Textile Enterprises Operate Under New Planning System, 6 pp.  
RUSSIAN, per, Tekstil'naya promyshlennost', No 8, Aug 1967, pp 37-39.  
JPRS 43142

The Use of Ship Locks at Hydroelectric Power Plants for Fish Passage From Down-Stream Into a Reservoir, by Z. M. Kipper.  
RUSSIAN, per, Trudy Sevashchani, Tekhtologicheskoi Komissii, Akad Nauk SSSR, Vyp. No 10, 1961, pp 239-243.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Some Problems Related to Determining a Rational Intensity of Fishing (Paper No. 6 in "Collection of Papers on Methods of Estimating Stocks and Making Catch Predictions of Commercial Fishes", by V. A. Abakumov.  
RUSSIAN, per, Trudy Vsesoyuznogo Nauchno-Issledovatel'skogo Instituta Moskovskogo Rybnogo Khozyaystva i Okeanografii (VNIRO), Vol 50, 1964, pp 179-192.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Economic Forecasting of the Development of Regions Highly Saturated with Natural Resources, by N. N. Nekrasov, 13 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 29-39.  
JPRS 43071

Democratic Centralism in Economic Planning, by L. Ya. Berri and G. V. Perov, 11 pp.  
RUSSIAN, per, Vestnik Moskovskogo Universiteta, Seriya VII -- Ekonomika, No 5, Sept/Oct 1967, pp 41-49.  
JPRS 43209

Mathematics and Problems of Economic Theory, by N. P. Fedorenko, 8 pp.  
RUSSIAN, per, Vestnik Moskovskogo Universiteta, Seriya VII -- Ekonomika, No 5, Sept/Oct 1967, pp 72-78.  
JPRS 43209



USSR  
Economic (Contd)

The Problem of Classifying Industrial-Production Personnel, by L. Viktorova, 9 pp.  
RUSSIAN, per, Vestnik Statistiki, No 9, Sept 1967, pp 26-32.  
JPRS 43021

The First All-Union Conference on Population Migration, by V. Perevedentsev, 8 pp.  
RUSSIAN, per, Voprosy Ekonomiki, No 8, Aug 1967, pp 144-148.  
JPRS 43021

On the Size of the Commercial Return Among Sturgeons, by A. F. Gun'ko and V. M. Naumov.  
RUSSIAN, per, Voprosy Ichtiologii, Vol 5, No 4, 1965, pp 652-656.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Political

Centralism and Economic Independence in Socialist Economics, by A. I. Katsenelinboycen and Ye. Yu. Fayerman, 21 pp.  
RUSSIAN, rpt, 1967.  
JPRS 43200

Socialism and the Countries of the East, by A. F. Korobkov, 13 pp.  
RUSSIAN, per, Voprosy Filosofii, No 5, 1967, pp 3-14.  
JPRS 43011

Military

Combat Operations Under Special Conditions - On Mountainous Terrain, Deserts and in the Northern Regions, by I. N. Vorob'yev, Z. Ye. Gudym.  
RUSSIAN, bk, Boevyye Deystviya v Osobykh Usloviyakh (V Gorakh, Pustynnyakh Severnykh Rayonakh), 1967, pp 3-174.  
JPRS 43020

USSR  
Military (Contd)

Anniversary of German Defeat, by K. S. Moskalenko.  
RUSSIAN, per, Sovetskaya Moldaviya, 9 May 1967, pp 1-2.  
JPRS 43226

Sociological

Feasibility of Establishing an Institute of Man, by Yevgeniy Bogat and Yu. Timofeyev, 12 pp.  
RUSSIAN, per, Literaturnaya Gazeta, 13 Sept 1967, p. 11.  
JPRS 43016

Soviet Physicist Argues Against the Compatibility of Science and Religion, by A. Prokhorov, 6 pp.  
RUSSIAN, mp, Literaturnaya gazeta, No 34, 1967, p. 12.  
JPRS 43006

Soviet Journalist Tours the Pamirs, by Ernst Genri, 6 pp.  
RUSSIAN, per, Literaturnaya Gazeta, 27 Sep 1967, pp 14-15.  
JPRS 43206

[Introductory Paper for Discussion] Socio-Demographic Characteristics of the Older Age Groups in the Population of the USSR, by N. N. Sachuk, 13 pp.  
RUSSIAN, bk, Obraz Zhizni i Stareniye Cheloveka, 1966, pp 3-4, 7-9, 8-19, 273-276.  
JPRS 43008

Socialism and the Employment Rate, by N. Tolstykh, 11 pp.  
RUSSIAN, per, Planovoye Khozyaystvo, No 9, Sept 1967, pp 13-20.  
JPRS 43021

To the Native Shores, by G. A. Savichev, 9 pp.  
RUSSIAN, bk, Pod vodoy vokrug zemli, 1967, pp 68-79.  
JPRS 43013

USSR  
Sociological (Contd)

Problems of Vocational Selection, by I. Martsev, 6 pp.

RUSSIAN, per, Professional'no-Tekhnicheskoye Obrazovaniye, No 8, 1967, pp 14-15.

JPRS 43147

Psychology of Engineering and Vocational-Technical Education, by I. Lavalenko, 7 pp.

RUSSIAN, per, Professional'no-Tekhnicheskoye Obrazovaniye, No 8, 1967, pp 18-19.

JPRS 43147

Labor Training of Youth and the Requirements of Scientific Organization of Labor, by A. Vasil'yev, 13 pp.

RUSSIAN, per, Sotsialisticheskiy Trud, No 8, Aug 1967, pp 80-87.

JPRS 43189

Consultations on the Regulations for Enterprises -- Problems of Labor and Wages, 7 pp.

RUSSIAN, per, Sotsialisticheskiy Trud, Aug 1967, pp 141-145.

JPRS 43189

The Problem of Involving School Children in Productive Labor, by I. B. Pervin, 20 pp.

RUSSIAN, per, Sovetskaya Pedagogika, No 8, 1967, pp 40-52.

JPRS 43147

Unemployment Problems in Coal Mining Areas, by A. Nezhnyy, 7 pp.

RUSSIAN, np, Trud, 21 Sept 1967, pp 2-3.

JPRS 43179

Simulation of a Teaching System Relating to the Process of Creativity, by M. S. Rytvinskaya, 5 pp.

RUSSIAN, per, Uchenyye zapiski Kazanskogo gosudarstvennogo universiteta, Vol 125, Book 6, 1965, pp 45-48.

JPRS 43052

The Development of New Intra-Class Relations in Kazakhstan, by G. M. Baltabayev, 7 pp.

RUSSIAN, per, Vestnik Akademii Nauk Kazakhskoy SSR, No 7, 1967, pp 14-20.

JPRS 43017

USSR  
Sociological (Contd)

Social Organization of a Socialist Society as an Object of Control, by A. K. Belykh, 18 pp.

RUSSIAN, per, Vestnik Leningraskogo Univ. No 11, issue No 2 of the Economics, Philosophy and Law Section, June 1967, pp 73-85

JPRS 43111

Soviet Workers to Get Pay Increase in 1968, by S. Bumakova and M. Golubev, 6 pp.

RUSSIAN, np, Vyshka, 4 Oct 1967, p. 3.

JPRS 43209

Interview with Svetlana Alliluyeva's Lover, by Enzo Biagi, 13 pp.

ITALIAN, per, L'Europeo, No 37, 14 Sep 1967, pp 16-21.

JPRS 43286

Some Denounces Svetlana Alliluyeva, by Enzo Biagi, 7 pp.

ITALIAN, per, L'Europeo, No 39, 28 Sep 1967, pp 44-47.

JPRS 43286

EASTERN EUROPE

Economic

Measures for Economizing on the Use of Wood Resources, by Jani Fullani, 10 pp.

ALBANIAN, per, Rruga e Partise, No 9, Sept 1967, pp 20-28.

JPRS 43181

Development of the Machine Industry in Berat Rreth, by Paskal Sinani, 10 pp.

ALBANIAN, per, Rruga e Partise, No 9, Sept 1967, pp 50-59.

JPRS 43179

Separate Price Base Needed in Trade Between CMEA Members, by At. Lyutov and Vera Ivanova, 20 pp.

BULGARIAN, per, Ikonomicheska Misl, No 7, Aug 1967, pp 17-18.

JPRS 43032

**Eastern Europe  
Economic(Contd)**

Results of Separate Price Base System in Trade between CMEA Members, by Stefan Stoilov, 21 pp.  
BULGARIAN, per, Ikononicheska misul, No 7,  
Aug 1967, pp 29-41.  
JPRS 43032

Viticulture in Bulgaria, 8 pp.  
BULGARIAN, np, Rabotnichesko delo, 21 Sept 1967,  
p. 3.  
JPRS 42937

Electronic Prosperity, by Dalibor Makous, 5 pp.  
CZECH, per, hospodarske noviny, No 32, 11 Aug  
1967, p 12.  
JPRS 43045

Central Reserves and the New Management System,  
by Jan Kasan, 13 pp.  
CZECH, per, Nova Mysl, Vol XXI, No 20, 3 Oct  
1967, pp 17-20.  
JPRS 43182

Financing Housing Construction for workers in  
Agriculture and Food Industry, 5 pp.  
CZECH, per, socialistické zemědělství, No 38,  
22 Sep 1967, pp 7-8.  
JPRS 43141

Preliminary Results of the First Fishing Expedi-  
tion to the South Atlantic, by U. Schmidt.  
GERMAN, per, Die Ernährungsindustrie, No 4, 1966,  
pp 6-11.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Status and Long-Range Outlook of the Production  
of Textile Machinery in Socialist Countries,  
by Siegfried Mirsch, 12 pp.  
GERMAN, per, Deutsche Textiltechnik, Vol XVII,  
No 8, Aug 1967, pp 481-485.  
JPRS 43193

Establishing a System of Complex Socialist  
Rationalization in the Domestic Trade, by  
Herbert Meyer, 7 pp.  
GERMAN, per, Der Handel, No 8, Aug 1967, pp  
324-326.  
JPRS 43202

**Eastern Europe  
Economic (Contd)**

Specialization of Parts and Components in the  
Machine Industry, by Dipl. Wirtsch, 11 pp.  
GERMAN, per, Standardisierung, Vol 13, No 5,  
May 1967, pp 195-197.  
JPRS 43091

Statistics on Commuters Within and Between  
Bezirks, by Gerhard Stachorski, 8 pp.  
GERMAN, per, Statistische Praxis, Vol 22, No 8,  
Aug 1967, pp 443-446.  
JPRS 43227

Importance of the 1968 Economic Plan in Long-  
Range Planning, by Heinz Dopfer, 5 pp.  
GERMAN, per, Die Wirtschaft, 24 Aug 1967, p 3.  
JPRS 43141

Effects of the Second Tisza Dam, by Marton  
Lovas, 7 pp.  
HUNGARIAN, per, Fizvelo, No 39, 27 Sep 1967,  
p 1.  
JPRS 43236

Agricultural Development and the Requirement for  
Implements, by Bela Csendes, 14 pp.  
HUNGARIAN, per, gazdasági szemle, No 14,  
Sep 1967, pp 1062-1070.  
JPRS 43139

Development of Pork Production and Supply, by  
Lihaly Gyori, 18 pp.  
HUNGARIAN, per, gazdasági szemle, No 14,  
Sep 1967, pp 1083-1093.  
JPRS 43139

Hungarian National Technical Development Com-  
mittee Reorganized, by Lajos Feher, 5 pp.  
HUNGARIAN, per, Magyar Kozlony, No 59,  
3 Sept 1967, pp 434-436.  
JPRS 43219

The Status of the National Technical Develop-  
ment Committee Modified, by Dr. László Mohácsy,  
5 pp.  
HUNGARIAN, per, Műszaki Kötet, No 17, 21 Sept  
1967, p. 3.  
JPRS 43010

Eastern Europe  
Economic (Contd)

New Economic Guidance System in Relation to the Economic Plan, by Istvan Briss, 19 pp.  
HUNGARIAN, per, Társadalmi Szemle, No 8-9, Aug-Sep 1967, pp 13-31.  
JPRS 43141

Favorable Effects of New Price System on National Economy Anticipated, by Emil Nyul, 9 pp.  
HUNGARIAN, per, Társadalmi Szemle, No 8-9, Aug-Sep 1967, pp 164-170.  
JPRS 43141

Reorganization of the Meat Economy and Its Problems, by Bondan Jarema, 7 pp.  
POLISH, per, Gospodarka miesna, No 8-9, Aug-Sept 1967, pp 1-4.  
JPRS 43069

Achievements of the Central Petroleum Products Office in 1966, by Ryszard Gluszczyk, 6 pp.  
POLISH, per, Nafta, No 7, July 1967, pp 225-226.  
JPRS 43033

Present Status of Polish Agriculture, by Z. L., 15 pp.  
POLISH, per, Nowe Drogi, Vol 21, No 9, Sept 1967, pp 108-116.  
JPRS 42937

Services Rendered by Agricultural Circles, by Roman Malinowski, 11 pp.  
POLISH, per, Nowe Rolnictwo, No 16, 16-31 Aug 1967, pp 9-12.  
JPRS 43139

Investments in Chemical Industry in 1966-1970, by Zofia Fiala, 9 pp.  
POLISH, per, Wiadomosci Narodowego Banku Polskiego, Vol XXIII, No 8, Aug 1967, pp 315-319.  
JPRS 43033

Projected Service Industry Development Studied, by Janina Libhard, 6 pp.  
POLISH, per, Wiadomosci Statystyczne, No 10, Oct 1967, pp 29-30.  
JPRS 43201

Eastern Europe  
Economic (Contd)

Economic and Scientific-Technical Cooperation Between Poland and East Germany, by Marek Lisjak, 7 pp.  
POLISH, per, Zycie Gospodarcze, No 41, 3 Oct 1967, pp 1,10.  
JPRS 43140

Proposal to Change Duration of Higher Agricultural Education, by Dr. Nicolae Zamfirescu, 6 pp.  
RUMANIAN, per, Agricultura Socialista, No 36, 7 Sept 1967, pp 1 & 5.  
JPRS 43031

Adjustment of Wholesale Prices in Some Socialist Countries, by C. Tudoran and G. Ionescu, 12 pp.  
RUMANIAN, per, Finante si Credit, No 9, Sept 1967, pp 66-74.  
JPRS 43202

Relation of Cooperative Democracy to Cooperative Farm Results, by Haralambie Ene, 10 pp.  
RUMANIAN, per, Lupta de Clasa, No 9, Sep 1967, pp 37-43.  
JPRS 43236

Cybernetics Applied to Economics, by Manea Manescu, 17 pp.  
RUMANIAN, per, Studii si Cercetari de Calcul Economic si Cibernetica Economica, No 2, 1967, pp 23-32.  
JPRS 43110

Factors Hampering Cost Reduction in Rumanian Coal Mining, by S. Michel and O. Hognan, 5 pp.  
RUMANIAN, per, Vinta Economica, Vol 5, No 36, 8 Sept 1967, pp 8, 9.  
JPRS 42938

Socialism and Efficiency, by Gh. Dolgu, 11 pp.  
RUMANIAN, per, Viata Economica, No 41, 13 Oct 1967, pp 1,2,4.  
JPRS 43237

New Framework for Future Development of Local State Organs, by Dumitru Holt, 6 pp.  
RUMANIAN, per, Viata Economica, Vol 41, 13 Oct 1967, p 3.  
JPRS 43237

Eastern Europe  
Economic (Contd)

Fertilizers which Will Be Produced by Yugoslav Industry in 1968-1970, by M. Todorovic, 10 pp.  
SERBO-CROATIAN, per, Agrohemija, No 7-8, July-Aug 1967, pp 285-293.  
JPRS 42938

Popovic Interviewed on Economic Reform, 10 pp.  
SERBO-CROATIAN, per, Borba, 5 Oct 1967, p 6.  
JPRS 43237

The Economic Activity of Agricultural Cooperatives in 1957-1966, by Savo Cukanovic, 22 pp.  
SERBIAN, per, Ekonomika Poljoprivrede, No 9, Sep 1967, pp 699-716.  
JPRS 43236

The Agricultural Cooperative -- A Form for Uniting the Direct Producers in Agriculture, by Savo Cukanovic, 16 pp.  
SERBIAN, per, Ekonomika Poljoprivrede, No 9, Sep 1967, pp 741-752.  
JPRS 43236

Role of Opstina Assemblies in Taxation of Personal Income and Other Incomes of Citizens, by M. Dj., 21 pp.  
CROATIAN, per, Financijske, Vol XXII, No 9/10, Sep-Oct 1967, pp 534-551.  
JPRS 43124

Current Port Developments Scrutinized, by Josko Vukov, 49 pp.  
SERBO-CROATIAN, per, Pomorstvo, No 6, Jun 1967, pp 1-28.  
JPRS 43063

Information on the Yugoslav Merchant Marine in 1966, 33 pp.  
SERBO-CROATIAN, per, Pomorstvo, No 7-8, Jul-Aug 1967, pp 1-42.  
JPRS 43069

Price Formation, Social Control, and Liberalization, by Dusan Karljickovic, 7 pp.  
SERBO-CROATIAN, per, Radna i društvena zajednica, No 7-8, Jul-Aug 1967, pp 372-377.  
JPRS 43182

Eastern Europe  
Economic (Contd)

The Structure and the Development of Highway Transportation in Yugoslavia, by Milorad Djinic, 8 pp.  
SERBO-CROATIAN, per, Transport, No 9, Sept 1967, pp 99-102.  
JPRS 43201

Increasing Importance of Chemical Industry to National Economy, by Frantisek Barbirek, 9 pp.  
SLOVAK, np, Pravda, 20 Sept 1967, p 2.  
JPRS 43192

Political

Marxism-Leninism Must Be Mastered Persistently, 9 pp.  
BULGARIAN, per, Partien zhivot, No 13, Sept 1967, pp 12-19.  
JPRS 43200

The Party Organization in the Ministry of Domestic Trade, by Dimitur Stancev, 7 pp.  
BULGARIAN, per, Partien zhivot, No 13, Sept 1967, pp 53-58.  
JPRS 43200

Timely Problems of Marxist Aesthetics, by Jozsef Sziget, 13 pp.  
HUNGARIAN, per, Arver Tudomány, No 7-8, Jul-Aug 1967, pp 440-452.  
JPRS 43143

The Marxist Approach to Religion, by Branko Bosnjak, 24 pp.  
SERBO-CROATIAN, per, Nase Tema, No 6, June 1967, pp 957-979.  
JPRS 42946

The Church in Socialist Society, by Zlatko Frid, 15 pp.  
SERBO-CROATIAN, per, Nase tema, No 6 (102), June 1967, pp 994-1007.  
JPRS 42946

Communists, Religion and the Church in Slovenia, by Zdenko Roter, 13 pp.  
SERBO-CROATIAN, per, Nase tema, No 6, (102) June 1967, pp 1058-1069.  
JPRS 42946

Eastern Europe  
Political (Contd)

Religion in a Rural Environment, by Stipe Suvar, 11 pp.  
SERBO-CROATIAN, per, Nase teme, No 6 (102), June 1967, pp 1070-1078.  
JPRS 42946

The Reorganization of the Federal Administration, by Lusan Kolovic, 15 pp.  
SERBO-CROATIAN, per, Radna i drustvena zajednica, No 7-8, Jul-Aug 1967, pp 337-347.  
JPRS 43143

The Political Rise of Stalin and the Cult of Personality Reviewed by Lajciak, by Milan Lajciak, 8 pp.  
SLOVAK, np, Pravda, 7 Oct 1967, p 3.  
JPRS 43191

Military

The Processing of Artillery Intelligence Data, by Ya. Molkhov, 5 pp.  
BULGARIAN, per, Armeyski pregled, No 8, Aug 1967, pp 80-82.  
JPRS 42936

Regulation Governing the Form for a Weapons Permit, the Location and Storage of Weapons, and Records of Arms and Munitions, 8 pp.  
SERBO-CROATIAN, per, Sluzbeni list SFRJ, No 36, 6 Sept 1967, pp 993-996.  
JPRS 42936

Sociological

Forms for Developing a Scientific Outlook in the Working People, by Nikola Makaveev, 11 pp.  
BULGARIAN, per, Partien zhivot, No 13, Sept 1967, pp 38-45.  
JPRS 43200

The Expansion and Improvement of Services for the Population, Part 1, by Mlodzimierz Lechowicz, 9 pp.  
POLISH, per, Przegląd drobnej wytworczosci, No 14, Jul 1967, pp 1-4.  
JPRS 43145

Eastern Europe  
Sociological (Contd)

The Expansion and Improvement of Services for the Population, Part 2, by Mlodzimierz Lechowicz, 11 pp.  
POLISH, per, Przegląd drobnej wytworczosci, No 15, Aug 1967, pp 1-4.  
JPRS 43145

Report on the Session of the Scientific Council of the Rumanian Institute for Pedagogical Sciences, by Romeo Dascalescu and Florica Popescu, 6 pp.  
RUMANIAN, per, Revista de Pedagogie, Vol 16, No 7-8, Jul-Aug 1967, pp 249-253.  
JPRS 43227

Electronics and Higher Education, by M. Radian and George Rulea, 9 pp.  
RUMANIAN, per, Romania Libera, No 7118, 8 Sept 1967, p. 3.  
JPRS 43031

WESTERN EUROPE

Economic

Norwegian Trawling 1965.  
NORWEGIAN, per, Fiskets Gang, No 26, pp 437-449.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Norwegian Trawling 1965.  
NORWEGIAN, per, Fiskets Gang, No 27, pp 467-474.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Political

Roche's Speech on October Revolution, by Mladko Roche, 19 pp.  
FRENCH, per, L'Humanite, 16 Oct 1967, pp 5-6.  
JPRS 43282

Western Europe  
Political (Contd)

Rochet's Report on International Activities,  
by Waldeck Rochet, 5 pp.  
FRENCH, per, L'Humanite, 20 Oct 1967, p 6.  
JPRS 43280

Main Topics of the Communist Slander Campaign  
against the Defense Policy of the Federal  
Republic of Germany, 19 pp.  
GERMAN, rpt, 1966.  
ACSI J-3481  
ID 2204047667

Swede Discusses Marxist Ideology, by Stig Lahti,  
8 pp.  
SWEDISH, mp, Norrskens Flamman, 17, 18 Aug 1967,  
p. 5.  
JPRS 43090

Military

Instructions for "Mosquito" Medium Range Wire-  
Guided Anti-Tank Missile,  
ITALIAN, bklet, 1966.  
ACSI J-2863  
ID Incl to 2850029267

Facts about Civil Defense - 1967 Edition, 20 pp.  
SWEDISH, rpt, 1967  
ACSI J-3490  
ID 2204047767

AFRICA

Economic

Activities and Organization of El Bouniane  
Company, by Jalel Damergel, 5 pp.  
FRENCH, mp, L'Action, 12 Sept 1967, p. 4.  
JPRS 43074

1966 Agricultural Production Statistics and  
prospects for 1967, 6 pp.  
FRENCH, per, Bulletin de l'Afrique Noire,  
No 474, 6 Sep 1967, pp 9572-9574.  
JPRS 43125

Africa  
Economic (Contd)

Report on 1966 Foreign Trade, 6 pp.  
FRENCH, per, Bulletin de l'Afrique Noire, No 474,  
6 Sep 1967, pp 9575-9577.  
JPRS 43125

1966 Annual Report of West African Central  
Bank, 5 pp.  
FRENCH, per, Bulletin de l'Afrique Noire,  
No 474, 6 Sept 1967, pp 9581-9582.  
JPRS 43196

Expansion of Oil Palm Plantations in 1966,  
6 pp.  
FRENCH, per, Bulletin de l'Afrique Noire,  
No 475, 13 Sept 1967, pp 9956-9958.  
JPRS 43196

Upper Volta's 1967-70 Economic Plan, 21 pp.  
FRENCH, per, Bulletin de l'Afrique Noire, No  
476, 20 Sep 1967, pp 9607-9621.  
JPRS 43035

Economic Prospects for Rwanda, 5 pp.  
FRENCH, per, Carrefour d'Afrique, No 68,  
Jul 1967, pp 4, 5-7 & 12-13.  
JPRS 43074

Governor Interviewed on Development of Province,  
by Albert Iula, 5 pp.  
FRENCH, per, Le Courrier d'Afrique, 8 Sep 1967,  
p 5; and 11 Sep 1967, p 3.  
JPRS 43133

Improvement of Telecommunications System  
Planned, 5 pp.  
FRENCH, per, Le Courrier d'Afrique, 16-17  
Sep 1967, pp 3 and 5; 15 Sep 1967, p 3, and  
19 Sep p 3.  
JPRS 43125

Outline of SONATRACH Activities, 5 pp.  
FRENCH, per, El Moudjahid, 16 Sep 1967, p 6.  
JPRS 43133

Italy Contracts to Aid Annaba Steel Mill,  
5 pp.  
FRENCH, mp, El Moudjahid, 17-18 Sept 1967,  
pp 1, 3.  
JPRS 43074

Africa  
Economic (Contd)

Finance Minister Discusses Cran Region, 8 pp.  
FRENCH, per, el Moudjahid, 17/18 Sep 1967,  
p 9.  
JPRS 43133

Problems of the Somali University Institute,  
by Don di Guntane, 6 pp.  
ITALIAN, per, La Tribuna, No 11, 1 Oct 1967,  
pp 11-12.  
JPRS 43196

Latest Accomplishments in the Electrification  
of Angola, 10 pp.  
PORTUGUESE, per, Actualidade Economica, Vol  
2, No 103, 16 Aug 1967, pp 41-43.  
JPRS 43196

Development of the Zambezi River Basin, by  
Jose Nunes Sarata, 7 pp.  
PORTUGUESE, per, Actualidade Economica, Vol III,  
No 105, 30 Aug 1967, pp 16-18.  
JPRS 43125

Political

JRDA Statement Supports Revolutionary Violence,  
5 pp.  
FRENCH, per, Horoya, 2 Oct 1967, pp 2, 3.  
JPRS 43074

Revolutionary Trends in Mali and Guinea, by  
Pierre Marnes, 6 pp.  
FRENCH, per, Le Mois en Afrique, No 21, Sep 1967,  
pp 7-12.  
JPRS 43133

Mobutu Interviewed by West German Weekly,  
6 pp.  
GERMAN, per, Stern, Vol 20, No 40, 26 Sept-  
2 Oct 1967, pp 43, 46, 48 & 50.  
JPRS 43074

Africa  
Sociological

Kasi-Oriental Province Beset by Problems,  
by Joseph Mvungu, 6 pp.  
FRENCH, per, Presence Congolaise, Vol 10,  
No 28, 2 Sept 1967, pp 1 & 5; Vol 10, No  
29, 9 Sept 1967, p. 4.  
JPRS 43196

Critique of Somali Development Projects,  
6 pp.  
ITALIAN, per, La Tribuna, No 11, 1 Oct 1967,  
pp 7, 8, 23.  
JPRS 43196

MIDDLE EAST

Economic

Law Pertaining to Nonresidents Dealing in Egyptian  
Currency, by 'Adil Hafiz Ghanim, 12 pp.  
ARABIC, per, Al-Amm al-'Amm, No 39, Oct 1967,  
pp 19-26.  
JPRS 43040

Evolution in Fighting Crimes in the Area of  
Supply, by 'Aqaddam Ibrahim al-'Aham, 10 pp.  
ARABIC, per, Al-Amm al-'Amm, No 39, Oct 1967,  
pp 55-60.  
JPRS 43040

Wartime Economy, by Dr. Isma'il Sabri 'Abd  
Allah, 7 pp.  
ARABIC, per, al-Tali'ah, No 9, Sept 1967,  
pp 13-15.  
JPRS 43197

International and Internal Challenges  
against Governmental Budget, by Riyadh Shaykh,  
ARABIC, per, al-Tali-ah, No 9, Sept 1967,  
pp 16-23.  
JPRS 43197

Israel Pressed by West on Arab Oil Issue,  
by B. Zabirow, 5 pp.  
RUSSIAN, per, Pravda Ukrainy, 15 Aug 1967,  
p. 3.  
JPRS 43007



Middle East  
Political

Minister Warns of Threat of Bureaucracy, 7 pp.  
ARABIC, per, al 'Amal, Sep 1967, pp 4-6.  
JPRS 43126

Haykal's "Inquiries" Questioned by Israeli CP  
Organ, 8 pp.  
ARABIC, per, al-Ittihad, 6 Oct 1967, p 4.  
JPRS 43282

What Does America Want?, 5 pp.  
ARABIC, per, al-Taliah, Jul 1967, pp 24-26.  
JPRS 43036

The Chances of Clashes and U.S. War Escala-  
tion Philosophy, by Jamil Kazim al-Manaf,  
7 pp.  
ARABIC, per, al-Tali'ah, No 9, Sept 1967,  
pp 65-68.  
JPRS 43197

Social Revolution Pursued to Confront  
Aggression, by 'Adil Hussain, 11 pp.  
ARABIC, per, al-Tali'ah, No 9, Sept 1967,  
pp 69-74.  
JPRS 43197

Toward a Decisive Political Organization,  
by Mubarak 'Abdu Fadl, 8 pp.  
ARABIC, per, al-Tali'ah, No 9, Sept 1967,  
pp 75-78.  
JPRS 43197

A Frenchman Looks at the Greek Political Situ-  
ation, by Thierry Maulnier, 5 pp.  
FRENCH, per, Le Figaro, 7 Sep 1967, p 5.  
JPRS 43126

French Reporter Interviews Premier Kollias,  
by Thierry Maulnier, 7 pp.  
FRENCH, per, Le Figaro, 8 Sep 1967, p 5.  
JPRS 43126

United Democratic Left Plans to Seize Power,  
5 pp.  
GREEK, per, Eleftheros Kosmos, 14 Sep 1967, pp 1,7.  
JPRS 43126.

Middle East  
Political (Contd)

Israeli CP Reply to Neues Deutschland, 11 pp.  
HEBREW, per, Aol Haam, 4 Oct 1967, pp 6 and 7.  
JPRS 43282

Reflections in Das Kapital, by Wolf Ehrlich,  
10 pp.  
HEBREW, per, Zo Haderekh, 30 Aug 1967, pp 5 & 7  
and 6 Sept 1967, p 2.  
JPRS 43090

Communist Says Israel Concealing Imperialist  
Ties, by Ruth Lubitch, 7 pp.  
HEBREW, per, Zo Haderekh, 6 Sept 1967,  
pp 4 & 7.  
JPRS 43090

Military

Plan for Security and Control of Cairo, by  
Ismahud al-Saba'iyy, 22 pp.  
ARABIC, per, al-Ahram al-'Amm, No 39, Oct 1967,  
pp 133-151.  
JPRS 43040

Interview with Commander Gavish on Israel-Arab  
Conflict, by Yosef Eshkol, 10 pp.  
HEBREW, per, Bamahane, 12 Sept 1967, pp 16 & 17  
JPRS 42949

Israel's Minister of Defense on Problems and  
Challenges in Occupied Areas, 15 pp.  
HEBREW, per, Samsheneh, 4 Oct 1967, pp 11-14.  
JPRS 43126

Sociological

Colleges and Institutes Admit 5,764 Students,  
by Ismahud Arif, 6 pp.  
ARABIC, per, al-Akhbar, 21 Sep 1967, pp 5 and 7.  
JPRS 43036

Austrian Communist Journalist Writes on His Trip  
to the Near East, by Otto Janacek, 27 pp.  
GERMAN, per, Volksstimme, 16, 17, 19, 20, 21, 22,  
24, 26, 27 and 28 Sep 1967, p 3 in each issue.  
JPRS 43118

Middle East  
Sociological (Contd)

Labor Conscription for IDF, by Shimeon Manuelli,  
5 pp.  
HEBREW, per, Hamahane, 5 Sep 1967, pp 12-13.  
JPRS 43040

After-Effects of the war in Jordan, by Vl.  
Iordanskiy, 3 pp.  
RUSSIAN, per, Za Rubezhom, 6-12 Oct 1967,  
pp 16-17.  
JPRS 43041

FAR EAST

Economic

A Discussion of China's Economic Situation, by  
Chi Ko-Chao, 6 pp.  
CHINESE, per, Chung-kuo Hsin-wen, 23 Sep 1967,  
pp 12-13.  
JPRS 43252

A General Study of Food Output in Mainland  
China (Part II), by Chi Yi-chai, 18 pp.  
CHINESE, per, Fei-ch'ing Yueh-pao, Vol 10, No  
8, 1 Oct 1967, pp 57-66.  
JPRS 43252

Effects of Communist Bandits' 'Cultural Revolution'  
on Agriculture, by Lin Ch'en, 22 pp.  
CHINESE, per, Fei-ch'ing Yueh-pao, Vol 10, No  
6, 31 Jul 1967, pp 62-70.  
JPRS 43252

Sihanoukville Free Zone Project, 5 pp.  
FRENCH, per, Le Sangkum, No 26, Sep 1967,  
pp 58-60.  
JPRS 43280

"Tokyo Shipping News", Forwarding of.  
JAPANESE, rpt, 29 Sept - 27 Oct 1967.  
DIA 5 852 0319 67

1967-1968 School Year Enrollment of  
Vocational Schools, 8 pp.  
MONGOLIAN, np, Unen, 18 May 1967, p 4.  
JPRS 43183

Far East  
Economic (Contd)

Increased Production and Conservation of  
Materials for the Machine Building Industry,  
by Van Ngoc, 5 pp.  
VIETNAMESE, per, Ky Thuat Cong Nghiep, No 7,  
Jul 1967, p 1.  
JPRS 43303

New Progress in the Agricultural University,  
by Pham Ke, 5 pp.  
VIETNAMESE, np, Nhan Dan, 31 Aug 1967, p. 3.  
JPRS 43079

Building a Material and Technical Base for  
Agricultural Cooperatives, by Nam Van, 9 pp.  
VIETNAMESE, per, Thoi-Su Pho-Thong, No 14,  
Jul 1967, pp 1-9.  
JPRS 43303

Consumption Policy of Party and Government  
during Wartime, by Vu Trong Nam, 10 pp.  
VIETNAMESE, per, Thoi Su Pho Thong, No 15,  
Aug 1967, pp 17-30.  
JPRS 43225

Political

Summary of the Struggle Against a Kuomintang  
Agent, 8 pp.  
CHINESE, per, Fei-ming-ti, No 11-12, 20 May  
1967, pp 6-7.  
JPRS 43238

Royalists Defend a Kuomintang Agent, 7 pp.  
CHINESE, per, Fei-ming-ti, No 11-12, 20 May  
1967, p 8.  
JPRS 43238

A Warm Breeze is Sweeping Over the Earth, 5 pp.  
CHINESE, per, Hsuan Chiao Chen Pao, No 10, 26 May  
1967, p 2.  
JPRS 43238

Revolutionary Committee in Peking Aeronautical  
Institute Established, 5 pp.  
CHINESE, np, Hung-ch'i, No 39, 21 May 1967,  
p. 5.  
JPRS 43205

Far East  
Political (Contd)

Commemorating 25th Anniversary of Mao's Talk to Yenan Forum, 5 pp.  
CHINESE, np, T'i-yu Ch'ien-shao, No 4, 27 May 1967, pp 1-2.  
JPRS 43205

The Basic Factor in the South Korean Revolution, by Ma Il-ho, 10 pp.  
KOREAN, np, Nodong Sinmun, 23 Sept 1967, p. 2.  
JPRS 43223

The Tragedy of China, by Yakovlev Mikhail Ivanovich, 14 pp.  
RUSSIAN, per, Za Rubezhom, No 40, 29 Sep-5 Oct 1967, pp 15-18.  
JPRS 43132

Hanoi Determined to Win and Defeat Americans, by Nguyen Van Tran, 7 pp.  
VIETNAMESE, np, Nhan Dan, 5 Sept 1967, p. 3.  
JPRS 43034

Nambo Uprising Cited in Speech, by Nguyen Van Tien, 5 pp.  
VIETNAMESE, np, Nhan-dan, 23 Sept 1967, pp 1-2.  
JPRS 43224

Japanese Scientist Delegation Denounces U. S. Crimes, 6 pp.  
VIETNAMESE, per, Nhan-dan, 24 Sep 1967, p 4.  
JPRS 43136

Eighteen Years of Sino-Viet Friendship, by Nguyen Van Huyen, 5 pp.  
VIETNAMESE, per, Nhan Dan, 1 Oct 1967, p 2.  
JPRS 43303

Our People's Invincible Strength, 5 pp.  
VIETNAMESE, per, Quan Doi Nhan Dan, 2 Sep 1967, pp 1,4.  
JPRS 43303

Great Banner of Solidarity, 5 pp.  
VIETNAMESE, per, Quan Doi Nhan Dan, 2 Sep 1967, pp 1,4.  
JPRS 43303

Far East  
Military

People's Air Defense in Hai Phong, by Do Chinh, 5 pp.  
VIETNAMESE, per, Nhan-dan, 20 Sep 1967, p 3.  
JPRS 43039

Guerrilla Tactics Versus Modern Weapons, by Tran Huong Duong, 6 pp.  
VIETNAMESE, np, Nhan-dan, 23 Sept 1967, p. 2.  
JPRS 43224

Combat Life in Vinh Linh, by Huu Tho, 6 pp.  
VIETNAMESE, per, Nhan-dan, 25 and 26 Sep 1967, p 3.  
JPRS 43117

How the Quartermaster Branch Feeds and Clothes the Army, by Duc Nghia, 5 pp.  
VIETNAMESE, per, Nhan-dan, 25 Sep 1967, p 2.  
JPRS 43117

Quartermaster Branch a Key to Victory, by Luong Nhan, 6 pp.  
VIETNAMESE, per, Nhan-dan, 25 Sep 1967, p 2.  
JPRS 43117

Maintaining Science and Technology Under War Conditions, by Phan Khue, 6 pp.  
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, No 3, Mar 1967, pp 1-4.  
JPRS 43121

Sociological

Modernization of Rural Areas in Cambodia, by Robert Garry, 15 pp.  
CAMBODIAN, per, Le Sangkum, No 25, Aug 1967, pp 94-98.  
JPRS 43280

Fight to the End Against Black Line of Revisionist Literature and Art, 5 pp.  
CHINESE, per, Chen-ku, 2 May 1967, p 2.  
JPRS 43238

Far East  
Sociological (Contd)

Progress and Morale in Thai Binh Province, by  
Pham Cuong and Nguyen Khac Vien, 10 pp.  
FRENCH, per, Democratie nouvelle, Sep 1967,  
pp 13-19.  
JPRS 43186

Nam Ha Carries Out Resolutions on Women's  
Activities, by Phan Dien, 5 pp.  
VIETNAMESE, per, Phu Nu Viet Nam, No 194, 16  
Aug 1967, pp 3,4.  
JPRS 43303

Biographic

Biographic Information, 5 pp.  
FRENCH, per, Le Sangkum, No 25, 26, Aug and Sep  
1967.  
JPRS 43280

LATIN AMERICA

Economic

Czechoslovak Commentary on Cuban Economy, by  
Valtr Komarek, 9 pp.  
CZECH, per, Pospondarske Noviny, No 33, 18 Aug  
1967, p 10, and No 34, 25 Aug 1967, p 11.  
JPRS 43135

The Streetcars of Havana, by Evelio Telleria  
Toca, 6 pp.  
SPANISH, per, Bohemia, 8 Sept 1967, pp 100-103.  
JPRS 43067

Record Sugar Cane Production Achieved in Oriente  
Province, by Ramon Castro Rus, 6 pp.  
SPANISH, per, Bohemia, 22 Sep 1967, pp 48-51.  
JPRS 43283

Prefabricated System Used for Construction of  
Housing, by Rafael Sanchez Laiebret, 5 pp.  
SPANISH, per, Bohemia, 6 Oct 1967, pp 18-21.  
JPRS 43283

Latin America  
Economic (Contd)

The Sugar Harvest in Oriente Province, by Jose  
Vazquez, 5 pp.  
SPANISH, per, Granma, 9 Sept 1967, p. 5.  
JPRS 43070

Party Takes Positive Steps to Improve Work  
Attitude, 6 pp.  
SPANISH, per, Granma, 19 Sep 1967, p 2.  
JPRS 43248

Two Factories Eliminate Overtime Pay, by Vicente  
Cubillas, 6 pp.  
SPANISH, per, Granma, 30 Sep 1967, p 4.  
JPRS 43248

A Call for Sugar Cane Harvest Volunteer Workers,  
by Miguel Martin, 10 pp.  
SPANISH, per, Juventud Rebelde, 8 Sept 1967,  
p. 4.  
JPRS 43070

The Sea and Fishing in Argentina.  
SPANISH, per, Pesca y Marina, Aug-Sept 1967,  
pp 6-8,10.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Political

An Italian's Conversation with Castro, by  
Rossana Rossanda, 8 pp.  
ITALIAN, per, Rinascita, No 24, 22 Sept 1967,  
pp 5-7.  
JPRS 43070

Italian Discusses Cuban Viewpoint, by Rossana  
Rossanda, 9 pp.  
ITALIAN, per, Rinascita, 29 Sep 1967, pp 29-  
31.  
JPRS 43122

Brazilian Newsmen Report on Che Guevara's  
Death, 8 pp.  
PORTUGUESE, per, O Cruzeiro, 28 Oct 1967, pp 10-  
11.  
JPRS 43302

Latin America  
Political (Contd)

The Administration of Justice in the People's Courts, by Luis Rolando Cabrera, 8 pp.  
SPANISH, per, Bohemia, 15 Sept 1967, pp 38-43.  
JPRS 43067

A View of the New Political Generation, by Juan Liendo Guevara, 7 pp.  
SPANISH, per, Elite, 14 Oct 1967, pp 38-40.  
JPRS 43302

Duvalier Family Dispute Rocks Haiti, by Ted Cordova-Claure, 6 pp.  
SPANISH, per, Marcha, 14 Oct 1967, p 19.  
JPRS 43302

Existing Crisis of the Theoretical Background, by Marcos Ilanos, 12 pp.  
SPANISH, per, Teoria y Practica, Aug 1967, pp 14-21.  
JPRS 43185

Interview with Stokely Carmichael, by Manuel Ferrer, 5 pp.  
SPANISH, per, Verde Olivo, 13 Aug 1967, pp 3-4.  
JPRS 43122

French Trotskyite Criticizes Cuban Foreign Policy, by Etienne Laurent, 22 pp.  
FRENCH, per, La Verite, Aug-Sep 1967, pp 19-28.  
JPRS 43282

LASO Considered a Victory for Castro, by Francois Maspero, 9 pp.  
FRENCH, per, Partisans, No 38, Jul-Sep 1967, pp 159-166.  
JPRS 43302

Sociological

Effects of Revolution on Cuban Culture, by Alejo Carpentier, 5 pp.  
FRENCH, per, Combat, No 7225, 6 Oct 1967, p. 8.  
JPRS 43185

Latin America  
Sociological (Contd)

The Rebel Youth Agricultural Technology School, by Mario G. del Cueto, 12 pp.  
SPANISH, per, Bohemia, 15 Sept 1967, pp 24-33.  
JPRS 43067

Team Studies Cuban Settlement, 14 pp.  
SPANISH, per, Granma, 28 Sept 1967, pp 6-7.  
JPRS 43185

Youth Mobilization in Camaguey, by Gilberto Gonzalez, 5 pp.  
SPANISH, per, Juventud Rebelde, 28 Sept 1967, p 8.  
JPRS 43185

Causes of Large Student Dropout Discussed, 5 pp.  
SPANISH, per, El Mundo, 19 Sep 1967, p 7.  
JPRS 43302

SCIENTIFIC

Aeronautics

Aerodynamics and the Design of Flight Vehicles, by S. I. Zonshayn.  
RUSSIAN, bk, Aerodinamika i Konstruktsiya Letatel'nykh Apparatov, 1966, 364 pp.  
\*NASA TT F-11,415

Agriculture

Technical Maintenance and Repair of Agricultural equipment in the USSR, by A. I. Selivanov, 10 pp.  
RUSSIAN, per, Mekhanizatsiya i Elektrifikatsiya Sotsialisticheskogo Sel'skogo Khozyaystva, No 9, Sep 1967, pp 2-6.  
JPRS 43128

Crop and Weather Report, August 1967, by D. Krumbiegel, 5 pp.  
GERM.A., per, Landwirtschaft, No 10, Oct 1967, pp 527-528.  
JPRS 43139

Scientific  
Agriculture (Contd)

Studies on the Forecasting Method of the Rice Blast by Means of Chemical Analysis of Leaves, 40 pp.  
JAPANESE, rpt, Plant Protection Section, Bureau of (Japanese) Agricultural Administration  
Japanese Ministry of Agriculture and Forestry, Apr 1963  
ACSI J-3191  
ID 2204036967

A Need to Increase the Reserves of Animal Fodder, by Ts. Dabaajants, 5 pp.  
MONGOLIAN, np, Unen, 9 May 1967, pp 2 & 3.  
JPRS 43183

Crop Rotation, by Duong Hong Hien, 5 pp.  
VIETNAMESE, np, Nhan Dan, 30 Aug 1967, p. 2.  
JPRS 43079

New Techniques of Bee Keeping, 10 pp.  
VIETNAMESE, per, Nhan-dan, 22 and 24 Sep 1967, p 2.  
JPRS 43136

Agricultural Implements Produced in Hoa Binh Province, by Ngoc The, 5 pp.  
VIETNAMESE, np, Nhan Dan, 29 Sept 1967, p. 2.  
JPRS 43225

The 5th-Month Rice Crop, by Phan Quang, 6 pp.  
VIETNAMESE, np, Nhan-dan, 7 Oct 1967, p. 2.  
JPRS 43224

Research Projects of Institute of Agricultural Science in 1966, 9 pp.  
VIETNAMESE, per, Tin Tuc Hoat Dong Hoa Hoc, no 3, Mar 1967, pp 35-40.  
JPRS 43121

Third Conference on Agriculture in North Vietnam, 5 pp  
VIETNAMESE, per, Tin Tuc Hoat Dong Hoa Hoc, no 3, Mar 1967, pp 44-47.  
JPRS 43121

Scientific  
Atmospheric Sciences

On Lithium Content in the Spectra of Stars of T Tauri Type and in Cosmic Rays, by G. A. Guradzyan.  
RUSSIAN, per, Dok AN SSSR, Vol 176, No 2, 1967, pp 291-294. P910378767  
Sci Tech Info Facility  
ST-ISA-CR-10659

A Study of the Rotation of the Magnetic Field With Depth in the Solar Atmosphere, by A. B. Severny.  
RUSSIAN, per, Izvestiya Krymskoi Astrofizicheskoi Observatorii, Vol 33, 1965, pp 3-33.  
NRL RTS 3650

Proposals for Forecasting in Science and Technology, by I. Popov. 10 pp.  
RUSSIAN, per, Nauchno-tekhnicheskiye obshchestva SSSR, No 8, 1967, pp 2-5.  
JPRS 43218

The Meteorological Radar Equation for the Coherent Scattering of Radar Waves By Cloud Droplets and Raindrops, by Lee Chi-chen.  
CHINESE, per, Ch'i-Hsiang Hsiieh-Pao, Vol 32, No. 2, June 1962.  
AFCL-Emm-67-159

Probabilities of the Stochastic Variations of Wet and Dry Days, by Yao Ch'en-sheng.  
CHINESE, per, Ch'i-Hsiang Hsiieh-Pao, Vol 36, No. 2, June 1966.  
AFCL-Emm-67-156

An Experiment on the Electrification and Growth of Frost Needles on the Surface of Frozen Water Drops in an Electric Field, by Ch'eng Hsiao-p'ing, and Ch'en Ch'ien.  
CHINESE, per, Ch'i-Hsiang Hsiieh-Pao, Vol 36, No. 2, June 1966.  
AFCL-Emm-67-163

Problems on the Geographical Distribution of the Atmospheric Electric Field Induced By Thunderstorm Activities, by Li Ch'i-ch'ien, and Lin Ch'ih-chang.  
CHINESE, per, Ch'i-Hsiang Hsiieh-Pao, Vol 36, No. 2, June 1966.  
AFCL-Emm-67-165

Wave Propagation in the m-to-cm Range, with Special Attention to Tropospheric Scatter, by H. D. Seehars.  
GERMAN, rpt, Technical Report No 2, 1966.  
Dept of Navy/NRL

Scientific  
Atmospheric Sciences (Contd)

Meteorology, by Kurt Dethloff, 12 pp.  
GERMAN, per, Steuermannagast (Quartermaster),  
Deutscher Militaerverlag, 1965, pp 199-216.  
Dept of Navy ONI tr 2399

Cuban Meteorological Service Director Explains  
Cuban Meteorological Program, 5 pp.  
SPANISH, per, Bohemia, 29 Sep 1967, pp 64-67.  
JPRS 43283

Behavioral & Social Sciences

Reading Automats and Pattern Recognition.  
RUSSIAN, rpt, Naukova Dumka Publishing House,  
1965, pp 1-37; 62-112; 156; 207; 245-288.  
\*ACSI J-3623  
ID 2204051667

Telepathy, Hypotheses, and Observations, by I.  
M. Kogan, 5 pp.  
RUSSIAN, per, Nauka i Tekhnika, No 4, 1967,  
pp 35-36.  
JPRS 43028

The Structure of Behavior, by N. Zhukov, 7 pp.  
RUSSIAN, per, Nauka i tekhnika, No 7, July  
1967, pp 7-9.  
JPRS 43025

A Monograph on Fish Acclimatization, by V. M.  
Ivashk.  
RUSSIAN, per, Rybnoe Khozvaistvo, Vol 41, No 2,  
1965, p 95.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

The Physicochemical Simulation of the Infor-  
mation and Thought Processes, by N. A. Kobosev,  
14 pp.  
RUSSIAN, per, Zhurnal fizicheskoy khimii, Vol  
41, No 7, 1967, pp 1723-1730.  
JPRS 43061

Need Seen to Upgrade Time and Motion Study, by  
V. Angelescu and M. Ferarini, 11 pp.  
HUMANIAN, mp, Viata Economica, Vol 5, No 35,  
1 Sept 1967, pp 8-9.  
JPRS 43086

Scientific  
Biological & Medical Sciences

The Role of Deep Waters of Polar and Sub-Polar  
Origin in the Enrichment of Deep-Sea Plankton, by  
K. V. Beklemishev.  
RUSSIAN, per, Bull. Moscow Nat. Soc., Ser. Biol.,  
Vol LXV, No 3, 1960.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

On the Fecundity of the Barents Sea Capelin, by  
J. F. Pozdniakov.  
RUSSIAN, per, Doklady Akad. Nauk, SSSR, Vol 112,  
No 4, 1957, pp 777.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Microbial Synthesis of Pesticides, by G. S.  
Murontsev, 8 pp.  
RUSSIAN, per, Doklady Vsesoyuznoy Grazhdn Lenina  
Akademii Sel'skokhozyaystvennykh Nauk imeni V.  
I. Lenina, No 8, Aug 1967, pp 11-14.  
JPRS 43108

Electronarcosis in Surgery - Conclusion, by  
M. I. Kuzin, N. M. Liventsev, 5 pp.  
RUSSIAN, bk, Elektronarkoz v khirurgii, 1966,  
pp 167-171.  
JPRS 43214

Electronarcosis in Surgery - Bibliography,  
by M. I. Kuzin, N. M. Liventsev, 15 pp.  
RUSSIAN, bk, Elektronarkoz v khirurgii, 1966,  
pp 172-181.  
JPRS 43214

Excerpts from the Book Physical Electrotonus  
of Nerves and Muscles - Conclusion, by D. S.  
Vorontsov and M. F. Shuba, 16 pp.  
RUSSIAN, bk, Fizicheskiy elektroton nervov  
i myshts, 1966, pp 192-209.  
JPRS 43009

Mechanism of Increasing Osmotic Resistance of  
Rats Erythrocytes with Adaption ot Hypoxia, by  
Z. I. Barbashova.  
RUSSIAN, per, Fiziologicheskii Zhurnal SSSR,  
Vol 50, 1964, pp 1385-1394.  
\*NASA TT F-11,410

Scientific  
Biological & Medical Sciences (Contd)

Quantitative Regularities of Feeding and Their Connection With the Balance or Energy of the Commercial Crab Menippe mercenaria (Say), by L. M. Sushchenya and R. Claro.  
RUSSIAN, per, Issledovaniya Tsentralino-Amerikanskikh Morei, Vol 1, 1966, pp 217-230.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Food of Fur Seals in the Western Part of the Pacific Ocean, by G. K. Panina.  
RUSSIAN, per, Izvestiya Tikhookeanskogo N.-I. Instituta Rybnogo Khozyaistva i Okeanografii (TINRO), Vol 58, 1966, pp 23-40.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

The Interrelations of Sea Lions and Fur Seals on Common Breeding Rookeries. (From Observations on the Reestablishment of Fur Seal Rookeries in the Kuril Islands), by A. N. Belkin.  
RUSSIAN, per, Izvestiya Tikhookeanskogo N.-I. Instituta Rybnogo Khozyaistva i Okeanografii (TINRO), Vol 58, 1966, pp 49-68.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Ultrasound Cardigraphy in experimental Mitral Stenosis, by M. N. Tumanovskiy, 14 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No 6, 1967, pp 15-24.  
JPRS 43047

Some Instrumental and Biochemical Indices in an Experimental Model of Recurring Myocardial Infarction, by Z. A. Volynskiy, T. I. Vol'fson, 7 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No 6, 1967, pp 64-67.  
JPRS 43047

Artificial Heart Implanted Into the Thoracic Cavity, by V. I. Shumakov, 14 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No 6, 1967, pp 112-120.  
JPRS 43047

Scientific  
Biological & Medical Sciences (Contd)

The 18th Session of the A. L. Myasnikov Therapy Institute of the USSR Academy of Sciences, by V. L. Metelitsa, 8 pp.  
RUSSIAN, per, Kardiologiya, Vol 7, No 6, 1967, pp 123-127.  
JPRS 43047

Transplantation of Organs, by G. D. Chesnokova, Ye. G. Dovgan', 13 pp.  
RUSSIAN, per, Khirurgiya, No 7, Jul 1967, pp 129-134.  
JPRS 43046

Soviet Developments in Molecular Biology, by Vladimir Engel'gardt, 6 pp.  
RUSSIAN, per, Kommunist, 22 Aug 1967, p. 2.  
JPRS 43076

Introduction, by V. S. Genes, 11 pp.  
RUSSIAN, bk, Nekotoryye Prostyve Metody Kiberneticheskoy Obrabotki Dannyykh Diagnosticheskikh i Fiziologicheskikh Issledovaniy, 1967, pp 5-12.  
JPRS 43051

Chapter III, Procedures for Improving Diagnostic Work in Medical Establishments, by V. S. Genes, 34 pp.  
RUSSIAN, bk, Nekotoryye Prostyve Metody Kiberneticheskoy Obrabotki Dannyykh Diagnosticheskikh i Fiziologicheskikh Issledovaniy, 1967, pp 49-72.  
JPRS 43051

Effect of Ionizing Radiation on Conditioned Reflex Action, by O. Ye. Voyevodina, 13 pp.  
RUSSIAN, bk, Otdalennyye Rezul'taty Vozdeystviya Luchey Rentgena na Vysshuyu Nervnyu Devatel'nost' Sobak, 115-128.  
JPRS 43077

Chapter 1, Theory Underlying the Study of Man's Vitamin Requirements, by S. N. Matsko, 14 pp.  
RUSSIAN, bk, Petrobnost' Cheloveka v Vitaminakh, 1966, pp 3-22.  
JPRS 43058



Scientific  
Biological & Medical Sciences (Contd)

Biology and Prospects for a Fishery for Blue Whiting (*Micromesistius pouasson* Risso) in the Northern Atlantic Ocean, by V. K. Zilanzov.  
RUSSIAN, per, Polyarnyi M.-I. i Proektnyi Institut Morskogo Rybnogo Khozyaistva i Okeanografi im. N. M. Kripovicha, No 6, 1966, pp 92-97.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

On an Ice Floe with the Harp Seals: Ice Drift of Biologists in the White Sea, by L. A. Popov.  
RUSSIAN, per, Priroda, No 9, Sep 1966, pp 93-101.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

New Model Filtration Membrane, by K. L. Gladilin.  
RUSSIAN, per, Priroda, No 8, 1967, pp 116-117.  
\*ACSI J-3710  
ID 2204052467

Controlled Biosynthesis of Chlorella, by V. E. Semenenko.  
RUSSIAN, per, Priroda, No 8, 1967, pp 116-117.  
\*ACSI J-3710  
ID 2204052467

Metallothrans.  
RUSSIAN, per, Priroda, No 8, 1967, pp 116-117.  
\*ACSI J-3710  
ID 2204052467

Prospects of Development of Acclimatization Projects in the USSR, by B. S. Malyutin.  
RUSSIAN, per, Rybnoe Khozyaistvo, Vol 42, No 1, pp 19-20.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

The Development of Acclimatization Works in the USSR, by B. S. Malyutin.  
RUSSIAN, per, Rybnoe Khozyaistvo, Vol 42, No 2, pp 19-20.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Scientific  
Biological & Medical Sciences (Contd)

Herring of the Korka-Karagin Region, by T. F. Kachina and V. G. Prokhorov.  
RUSSIAN, per, Rybnoe Khozyaistvo, Vol 42, No 12, pp 4-5.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Sea Coloring to Designate Marine Fishery Limits, RUSSIAN, per, Rybnoe Khozyaistvo, Vol 43, No 1, 1967, p 42.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Some Data on the Biology of the Squid of the South-Eastern Part of the Pacific Ocean, by A. A. Baral.  
RUSSIAN, per, Rybnoe Khozyaistvo, Vol 43, No 8, pp 15-17.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

On Restoring the Crayfish Stocks, by D. Ipatov and G. Tikhomirova.  
RUSSIAN, per, Rybovodstvo i Rybolovstvo, No 1, Jan/Feb 1967, p 19.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

White Amur in Iran Waters, by Yu. Orlov.  
RUSSIAN, per, Rybovodstvo i Rybolovstvo, No 1, Jan/Feb 1967, p 20.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Ultraweak Luminescence of Biological Systems, by B. N. Tarusov, I. I. Ivanov and Yu. M. Petrusevich, 6 pp.  
RUSSIAN, bk, Sverkhslaboye Svyecheniye Biologicheskikh System, 1967, pp 3-8.  
JPRS 43213

Methods of Measuring Ultraweak Chemiluminescence by B. N. Tarusov, I. I. Ivanov and Yu. M. Petrusevich, 11 pp.  
RUSSIAN, bk, Sverkhslaboye Svyecheniye Biologicheskikh System, 1967, pp 9-15.  
JPRS 43213

Scientific  
Biological & Medical Sciences (Contd)

Distribution of Flyingfishes (Family Exocoetidae) in the Western and Central Parts of the Pacific Ocean, by N. V. Parin.

RUSSIAN, per, Trudy Instituta Okeanologii, Vol 41, pp 153-162.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

On Some Regular Features of the Summer Migration of the Cod in the Southern Part of the Barents Sea, by K. G. Konstantinov and A. I. Mukhin.

RUSSIAN, per, Trudy PINRO, Vol 16, 1964, pp 227-233.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

The Laws Governing the Growth of Fish, and Their Significance in Population Dynamics, by N. I. Chugunova.

RUSSIAN, per, Trudy Soveshchani, No 13, 1961, pp 94-107.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

The Possible Influence of the Nutrition of Young Cod on Its Abundance, by I. Ya. Ponomarenko.

RUSSIAN, per, Trudy Soveshchani, No 13, 1961, pp 301-306.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

Effect of Histones on the Development of the Sea Urchin Eggs, by V. I. Vorob'iev and A. A. Neifakh, 9 pp.

RUSSIAN, per, Tsitologiya, Vol 6, 1964, pp 496-498.

P911354767

AEC LA-Tr-67-43

Flyingfishes (Exocoetidae and Cyprinopterygidae) of the Sea of Japan and Adjacent waters, by N. V. Parin.

RUSSIAN, per, Voprosy Ikhtologii, Vol 2, No 2, pp 224-229.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

Scientific  
Biological & Medical Sciences (Contd)

Changes in Planning Medical Research Outlined, by Yu. I. Naumenko, 6 pp.

RUSSIAN, per, Zdravookhraneniye Rossiyskoy Federatsii, No 8, 1967, pp 36-40.

JPRS 43012

Types of Spatial Distribution and the Mechanism of Population Dynamics of Terrestrial Vertebrates, by N. P. Naumov.

RUSSIAN, per, Zhurnal Obshchey Biologii, Vol 26, No 6, 1965, pp 625-632.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

A High Speed Plankton Net, by M. A. Jaschnov.

RUSSIAN, per, Zoological Journal, Academy of Sciences of the USSR, Vol 40, No 1, 1961, pp 122-128.

Dept of Interior

Fish and Wildlife Service

BCF, Bureau of Foreign Fisheries

Some Problems of Special Decontaminating Processes in ABC Warfare, by Polkovnik Iv.

Yotov, 5 pp.

BULGARIAN, per, Armeyski pregled, No 8, Aug 1967, pp 63-65.

JPRS 42936

New Military Neurotoxins, by Zlatko Binenfeld, 16 pp.

CROATIAN, per, Vojnosanitetski Pregled, Vol 23, No 1, 1966, pp 40-45.

JPRS 43014

Biological Bases for the Therapeutic Use of the Bee Venom, by N. M. Artemov, 48 pp.

FRENCH, rpt.

Dept of Navy ONI tr 2448

Experimental Study of Cerebral Anoxia Induced by Various Methods. The Search for Electrobiologic Correlations, by H. Laborit, C. Baron, 32 pp.

FRENCH, rpt, 1967

Dept of Navy ONI tr 2476

Experimental Study of Metabolic Disturbances Resulting from Irreversible Hemorrhagic Shock and Their Therapeutic Treatment. Role of the Carboxylation of Pyruvate, by P. Laborit, H. Weber, 50 pp.

FRENCH, rpt CEPREPE, Laboratory of Butoxology, 1967.

Dept of Navy ONI tr 2463

Scientific  
Biological & Medical Sciences (Contd)

Contributions to the Study of the "Slow" and "Fast" Motor Systems of the Lateral Muscle of Teleosteans, by Andre Barats.  
FRENCH, per, Archives D'Anatomie Microscopique et de Morphologie Experimentale, Vol 50, No 1, 1961, pp 91-187.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Dose Delivered to the Thyroid Gland Following Inhalation of Fission Products. Fission of  $^{239}\text{Pu}$  by Fast Neutrons, by D. Mechali, M. Dousset, 30 pp  
FRENCH, per, Health Phys., Vol 12, 1966, pp 15-27. P911335867  
AEC BNWL-Tr-18

On the Relation Between Stock Density and Growth in the Plaice Population of the German Bight, by Gotthilf Hempel.  
GERMAN, per, Berichte der Deutschen Wissenschaftlichen Kommission für Meeresforschung, Vol 15, No 2, 1958, pp 132-144.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

On the Behaviour of Fish Shoals During Fishing With Midwater Trawls, by H. Mohr.  
GERMAN, per, Protokolle zur Fischereitechnik, Vol 37, No 8, Mar 1963, pp 149-159.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Investigations on the Toxicity of New Pesticides and Waste Water Materials Against Fish, by Dietwart Nehrung.  
GERMAN, per, Zeitschrift für Fischerei und deren Hilfswissenschaften, Reprint from Vol 14 New Series, Book 1/2, 1966.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Experiments to Manufacture Packaging Materials Having Antimicrobial Effect, by I. Janoczky and J. Murideany.  
HUNGARIAN, per, Anyagmozgatas Csomagolas, No 4, 1967, pp 7-11.  
\*ACSI J-3602  
ID 2204051467

Scientific  
Biological & Medical Sciences (Contd)

Study on the Migration of Squid (Ommastrephes Sloani Pacificus Steenstrup) as Related to the Phases of the Moon, by Mototsugu Hamabe.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, Vol 30, No 3, 1964, pp 209-215.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

On the Movement of Fish Shoals and the Change of Bottom Temperatures on the Trawl-Fishing Grounds of the Eastern Bering Sea, by H. Koto and T. Maeda.  
JAPANESE, per, Bull. Jap. Soc. Sci. Fish., Vol 31, No 10, 1965, pp 769-780.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Muscular Dystrophy of Carp Due to Oxidized Oil and the Preventive Effect of Vitamin E, by Y. Hashimoto, T. Okaichi.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, Vol 32, No 1, 1966, pp 64-69.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Biochemical Study of the Loss of Freshness in Ice-Stored Plaice and Skipjack, by Uchiyama Hitoshi, Suzuki Taneko.  
JAPANESE, per, Bulletin of the Japanese Society of Scientific Fisheries, Vol 32, No 3, pp 280-285.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Application of Standard Decompression Tables in the Prevention of Decompression Sickness in Divers, by L. Laba.  
POLISH, per, Biuletyn Inst. Narymowy Morsk. w Gdansk, Vol 13, 1964, pp 157-183.  
NLL 6180.59 (1754)

Scientific  
Biological & Medical Sciences (Contd)

Disturbances of Water Exchange and Growth Rate of Rainbow Trout, by J. Domurat.  
POLISH, per, Zeszyty Naukowe Wyzszej Szkoły Rolniczej Wolsztynie, Vol 21, No 4, 1966, pp 563-568.

\*Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Marine Proteins in Latin American Nutrition, by Victor H. Bertulle.

SPANISH, mono, 9 pp.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Extract on the Chemical-Nutritional Composition and the Alimentary Value of Fish Meal (Merluccius Gavi and Engraulis Ringens) Prepared for Human Consumption by the C. Verrando Method, by P. Masoero, J. A. Ducato Backus.  
SPANISH, per, Excerpt from the Annals of the Faculty of Veterinary Medicine in Turin, Vol 13, 1963, 6 p.

Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Search for Proteins to Forestall the Death of Babies in Infancy.

SPANISH, per, Presencia, 27 Aug 1967.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Summary of the Mountain Province Medical Research Conference by Minister of Health Pham Ngoc Thach, by Pham Ngoc Thach, 8 pp.  
VIETNAMESE, per, Y Hoc Thuc Hanh, No 146, Aug 1967, pp 1-4.  
JPRS 43186

Chemistry

New Variant of Colorimetric Determination of Low Amounts of Hydrogen Sulphide in Mineral Waters, by S. S. Zavednov.  
RUSSIAN, per, Gidrokhimicheski Materialy, Vol 35, 1963, pp 203-206.  
NLL RTS 3584

Scientific  
Chemistry (Contd)

Thin-Layer Chromatography of Phenols., by I. Klesment and E. Iageda.  
RUSSIAN, per, Izv. AN Est. SSSR Ser. fiz.-Mat. i Tekh. Nauk, Vol 14, No 2, 1965, pp 266-272.  
NLL RTS 3548

Oxidation of Organic Compounds, Report No 40, Oxidative Ammonolysis of O-Xylene, by I. S. Kolodina and B. V. Suvorov.  
RUSSIAN, per, Izvest. Akad. Nauk Kazakh. SSR Ser. Khim., Vol 2, No 22, 1962, pp 92-97.  
NLL RTS 3443

Formation of Charge Transfer Complexes in Systems of Substituted Aromatic Hydrocarbons With Electron-Donating Organic Compounds. I. Colorimetric and Spectrophotometric Investigation of Binary Systems of Nitrobenzene with Organic Lewis Bases, by M. G. Voronkov and A. Ya. Deich.  
RUSSIAN, per, Izv. Akad. Nauk Latv. SSR. Ser. Khim., No 4, 1965, pp 432-444.  
NLL RTS 3740

Quantitative Fatty Acid Composition of Medicinal Cod Oil, by S. R. Dominova.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedenii. Fishchavaya Tekhnologiya, No 3, 1966, pp 65-68.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Evaluation of the Quality of a Dispersion Obtained by Sonification of Liquids and Malts, by V. F. Popov.  
RUSSIAN, per, Khim. Prom. St., Vol 12, 1964, pp 18-21.  
NLL RTS 3766

Investigations in the Series of Cyclobutane Carboxylic Acids. V. Synthesis of Bisquaternary Salts of Alkamine esters and Acides of Stereo-Isomeric Truxillic Acids, by A. P. Arends-uk, A. P. Skoldinov.  
RUSSIAN, per, Khimikofarmatsevticheskiy Zhurnal, No 8, Aug 1967, pp 18-21.  
JPRS 43284

Scientific  
Chemistry (Contd)

Derivatives of ethyleneimine. V. Diethyleneimides of Pyrimidyl-r-Amidophosphoric Acids, by N. V. Sazonov and A. A. Kropacheva, 6 pp. RUSSIAN, per, Khimikofarmatsevticheskiy Zhurnal, No 8, Aug 1967, pp 32-35. JPRS 43284

Synthesis and Pharmacological Investigation of Nonsymmetric Alpha, Omega-Diquaternary Salts of the Quinuclidine Series, by Ye. Ye. Mikhlin, V. Ya. Vorob'yeva, 8 pp. RUSSIAN, per, Khimikofarmatsevticheskiy Zhurnal, No 8, Aug 1967, pp 35-40. JPRS 43284

Calculation of the Diborane ( $B_2H_6$ ) Molecule in the Two Centres Approximation, by V. P. Bulychev and M. G. Veselov. RUSSIAN, per, Litov. fiz. Sbornik, Vol 3, No 1-2, 1963, pp 253-259. NLL RTS 3610

The Nature of the Crystalline Structure of Fats and The Fatty Base of Margarine, by N. I. Kozin and G. K. Belyaeva. RUSSIAN, per, Masloboino Zhirovaya Prom., Vol 31, No 12, 1965, pp 12-16. NLL RTS 3661

Investigation of the Macrostructure of Supported Catalysts, by K. M. Kholyavenko, M. Ya. Rubanik. RUSSIAN, per, Nauch. Osnovy Podbora i Pro. Kat. Akad. Nauk SSSR Sib. Otd., 1964, pp 224-228. NLL RTS 3446

Additivity of the Polarisability Tensor and Polarisabilities of Bonds, by M. F. Vuks. RUSSIAN, per, Optika i Spektroskopiya, Vol 2, No 4, 1957, pp 494-501. NLL RTS 3581

Solubility of Uranium Tetrafluoride in Aluminum Salt Solutions, by V. M. Vdovenko and G. A. Romanov, 5 pp. RUSSIAN, per, Radiokhimiya, Vol 9, No 3, 1967, pp 384-386. JPRS 43026

Scientific  
Chemistry (Contd)

Nickel-Boron Phase Diagram, by A. P. Smiryagin and O. S. Kvurt. RUSSIAN, per, Tr. Gos. n-i i Proekt. Inst. Splavov. i Obrab. Tsvet. Met., No 24, 1965, pp 12-16. NLL 9022.4 (66/343)

Copper Corner of the System Copper-Nickel Boron, by A. P. Smiryagin and O. S. Kvurt. RUSSIAN, per, Tr. Gos. N-i i Proekt. Inst. Splavov. i Obrab. Tsvet. Met., No 24, 1965, pp 17-25. NLL 9022.4 (66/344)

Low-Concentration Catalysts on Carriers, by E. I. Gal'debrand. RUSSIAN, per, Trudy Inst. Khim. Nauk AN Kazakh SSR, Vol 13, 1965, pp 67-117. NLL RTS 3611

Investigation into the Properties of Synthetic Filtering Materials, by I. P. Petrov. RUSSIAN, per, Trudy Vost NII, No 6, 1965, pp 104-114. NLL 8313.4 (5381)

Mechanism in the Formation of a Phenazine Ring by the Alkaline Condensation of Aromatic Nitro Compounds with Aromatic Amines, by S. B. Serebryanyi. RUSSIAN, per, Ukrain. Khim. Zhur., Vol 21, 1965, pp 350-360. NLL RTS 3351

The Determination of Antioxidants and Their Chromatographic Separation, by B. Sedlachek. RUSSIAN, per, Voprosy Pitanija, Vol 23, No 4, 1964, pp 8-13. NLL RTS 3627

Type I and Type 2 Polarographic Maxima, by T. A. Kryukova. RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 21, 1947, pp 365-375. NLL RTS 3714

Scientific  
Chemistry (Contd)

Polarization in the Polarography of Nickel and Cobalt Pyridine Complexes, by Ya. I. Tur'yan and G. F. Serova.  
RUSSIAN, per, Zhur. fiz. Khim., Vol 31, 1957, pp 1976-1982.  
NLL RTS 3675

Absorption Spectra of Single Crystals of Lithium Hydride, by B. L. Dvinyaninov, by F. F. Gavrilov, 12 pp.  
RUSSIAN, per, Zh. Prikl. Spektrosk., Akad. Nauk BSSR, Vol 6, 1967, pp 62-65. P911355567  
AEC UCRL-Trans-10116

Catalytic Oxidation of Benzene in the Gas Phase, by V. V. Pigulevskii and E. Ya. Yarzemskaia.  
RUSSIAN, per, Zhurnal Obshchei Khimii, No 5, 1935, pp 1620-1628.  
NLL RTS 3567

The Movement of Solution Near a Dropping Mercury Electrode. III. Movement in Concentrated Solutions of Foreign Electrolytes and the Formation of False Waves on the Polarographic Curve, by T. A. Kryukova and B. N. Kabanov.  
RUSSIAN, per, Zhurnal Obshchei Khimii, Vol 15, 1945, pp 294-302.  
NLL RTS 3713

Continuous Process of Precipitation of Plutonium Salts, by Pierre Richard, 80 pp  
FRENCH, rpt, 1967 P911354567  
AEC ORNL-Tr-1720

Some Technical and Economic Aspects of Radiocatalysis in Application to Fuel Cells, by J. F. Henry and E. Gevenois, 32 pp.  
FRENCH, rpt, 1967 P911334567  
AEC BNL-Tr-142

Resistance to Ozone, by C. Thelamon-Meynard 16 pp.  
FRENCH, per Caoutchouc et des Plastiques, No 43, Feb. 1966, pp. 187-192 P9443767  
NSTIC 1831

Polarographic Determination of Small Amounts of Tungsten, by R. Bock and B. Bockholt, 21 pp.  
GERMAN, per, Z. Anal. Chem., Vol 216, 1967, pp 21-29. P911355667  
AEC UCRL-Trans-10123

Scientific  
Earth Sciences & Oceanography

Development of Marine Underwater Research, by B. P. Manteyfel', 181 pp.  
RUSSIAN, rpt, Academy of Sciences of the USSR Oceanographic Commission Underwater Research Section, 1965.  
Dept of Navy ONI tr 2462

Certain Regularities in the Quantitative Distribution of Bottom Fauna in Antarctic Waters, by G. M. Beliaev and P. V. Ushakov.  
RUSSIAN, per, Doklady Akademii Nauk SSSR, Vol 112, No 1, 1957, pp 137-140.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Oceanographic Research above a Nine-Kilometer Abyss, by M. Rostarchuk, 5 pp.  
RUSSIAN, per, Ekonomicheskaya Gazeta, No 17, Apr 1967, p 27.  
JPRS 43030

Construction of Space (Cosmic) Polygonometry, by O. S. Razumov, 13 pp.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Geodeziya i Aerofotos'yemka, No 2, 1966, pp 49-57.  
JPRS 43027

Mastering the Riches of the World's Oceans, by A. A. Yelizarov, V. V. Aslennikov, 11 pp.  
RUSSIAN, per, Morskoj Obornik, No 5, May 1967, pp 33-38.  
JPRS 43207

Experiment in the Use of the "Ladoga" Facsimile Apparatus for Fish Locating, by V. D. Dibner and M. M. Polyakov, 7 pp.  
RUSSIAN, per, Rybnoye Khozyaystvo, No 6, 1967, pp 35-37.  
JPRS 43030

The Effect of Hydrological Conditions on Commercial Stocks of Pacific Saury (Cololabis saira) by Yu. V. Novikov.  
RUSSIAN, per, Rybnoye Khozyaystvo, Vol 42, No 1, pp 16-18.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Scientific  
Earth Sciences & Oceanography (Contd)

The Fluorine Distribution in the Interstitial Waters and Sediments of the Black Sea, by O. V. Shishkina, G. A. Pavlova.  
RUSSIAN, rpt, Trudy Instituta Okeanologii, AN SSSR, Vol 83, 1967, pp 83-98.  
Dept of Navy/NRL

The Usage of NMR for Differential Measurements in the Magnetic Field of the Earth, by A. V. Melnikov, 17 pp.  
RUSSIAN, per, Vadernyy Magnitnyy Rezonans, No 1, 1965, pp 49-63.  
JPRS 43043

Problems in the Use of Natural Resources, by N. V. Mel'nikov, 17 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 6-19.  
JPRS 43071

The Role of Geological Science in the Development of the Mineral Raw Material Resources of the USSR, by A. V. Sidorenko, 12 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 20-28.  
JPRS 43071

Discussion of the Reports, by N. P. Fedorenko, 18 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 40-56.  
JPRS 43071

Mediterranean Sea Fishing Regions, by Yehia al-Takli, 6 pp.  
ARABIC, per, Al-Malah, 24 Sep 1967, p 3.  
JPRS 43040

Current Velocities, Specifically in the Deep and Bottom Waters, by Georg Wust.  
GERMAN, per, Wissenschaftliche Ergebnisse der Deutschen Atlantischen Expedition auf dem Forschungs- und Vermessungsschiff, Vol 6, No 2, 1957, pp 321-351.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Effect of Additives on the Drying of Green Iron Ore Pellets, by M. Wada and O. Tsushiya.  
JAPANESE, per, Tetsu to Hagane, Vol 53, No 5, 1967, Lecture 4, p 31.  
KB 7095

Scientific  
Electronics & Electrical Engineering

Distribution of Breakdown Strength of Discharge Gaps in Mercury Arc Rectifiers, by A. A. Pertsev.  
RUSSIAN, per, Elektrichestvo, No 10, 1965, pp 76-79.  
NLL 9022.09 (4457)

RRRV in Power Systems and Requirements of 110-220 kV Circuit-Breakers, by G. A. Dorf and V. D. Yurenkov.  
RUSSIAN, per, Elektricheskii Stantsii, Vol 36, No 11, 1965, pp 54-59.  
NLL 9022.09 (4401)

Elektroapparat Plant -- First in Domestic High-Voltage Equipment Building, by S. N. Zakharov, 6 pp.  
RUSSIAN, per, Elektrotehnika, No 9, Sept 1967, pp 1-3.  
JPRS 43212

Evolution of Electrical Measurement Techniques During the Current Five-Year Plan, by V. A. Vyskrebentsev, 5 pp.  
RUSSIAN, per, Izmeritel'naya Tekhnika, No 8, Aug 1967, pp 42-43.  
JPRS 43130

Terminology of Semiconductor Electronics, by A. Ya. Fedotov.  
RUSSIAN, per, Izv. VUZ Radiotekhnika, Vol 2, No 4, 1959, pp 490-491.  
NLL 5828.4F (12140)

An Automated Design System, by G. Gorenzidy, 3 pp.  
RUSSIAN, per, Nauka i Tekhnika, No 4, 1957, pp 2-5.  
JPRS 43042

Correction of Amplitude Spectra Using a Digital Computer, by G. I. Zabyakin, 9 pp.  
RUSSIAN, per, Ob'edinennyi Institut Yadernykh Issledovaniy,  
Dept of Navy ONI tr 2481

Instruments and Means of Automation, by G. A. Simonyan, 7 pp.  
RUSSIAN, per, Prilozheniya i Sistemy Upravleniya, No 9, Sep 1967, pp 1-3.  
JPRS 43130

Scientific  
Electronics & Electrical Engineering (Contd)

Tape Recorders for 1967, by R. Shleysner, V. Slizkov and L. Kozlovskaya, 7 pp.  
RUSSIAN, per, Radio, No 9, Sept 1967, pp 18-19.  
JPRS 43022

Device and Principle of Operation of Digital-Analog Control Machines in Commercial Ship Control, by V. O. Chernyshev and Yu. O. Chernyshev, 5 pp.  
RUSSIAN, per, Rybnoye Khozyaystvo, No 6, 1967, pp 76-78.  
JPRS 43075

Theory of Complex System with a Hierarchical Control Structure, by A. I. Kukhtenko.  
RUSSIAN, bk, Slozhnye Sistemy Upravleniya, 1966, pp 6-20.  
\*NASA TT F-11,412

Results of Robot-Designing Competition, 13 pp.  
RUSSIAN, per, Tekhnika molodezhi, No 8, 1967, pp 7-11.  
JPRS 43055

The Effectiveness of Some Types of Plastic Explosion Proof Joints for Enclosures of Electrical Equipment Under Short-Circuit Arc Fault Conditions, by A. A. Kaimakov.  
RUSSIAN, per, Trudy Vost NII, Vol 6, 1965, pp 161-168.  
NLL 8313.4 (5383)

Proving Tests of Flexible High-Voltage Rubber-Insulated Cables, by A. G. Bezeneshnykh and I. K. Popov.  
RUSSIAN, per, Trudy Vost NII, No 6, 1965, pp 176-190.  
NLL 8313.4 (5386)

Sinterplate Nickel-Oxide Electrode With Plastic Binder, by L. N. Sagoyan.  
RUSSIAN, per, Zh. Prikl. Khim., Vol 39, No 9, 1966, pp 2131-2133.  
NLL 9022.4 (66/340)

Performance of the Digital Computer of the Central Office of the National Power System, by V. Monart, 6 pp.  
ROMANIAN, per, Energetica, Vol 15, No 8, Aug 1967, pp 344-346.  
JPRS 43115

Scientific  
Energy Conversion (Non-Propulsive)

New, More Reliable Oil Supply System for the Hydrogen Shaft-End Seals of Large Turbo-Generators, by V. D. Vekshin.  
RUSSIAN, per, Elektricheskii Stantsii, Vol 37, No 4, 1966, pp 53-56.  
NLL 9022.09 (4486)

800 MW Single-Shaft Turbine,  
RUSSIAN, per, Elektricheskii Stantsii, Vol 37, No 5, 1966, pp 95-96.  
NLL 9022.09 (4494)

Limits of Flaw Detection in Steam Generator Tubes for Nuclear Power Stations, by A. Kuhlmann and F. -J. Adamsky.  
GERMAN, per, Atomwirtschaft-Atomtechnik, Vol 11, No 4, 1966, pp 174-178.  
HB 7246

The New Control Center of the National Power Dispatching System, by E. Constantinescu, D. Feldman, 7 pp.  
ROMANIAN, per, Energetica, Vol 15, No 8, Aug 1967, pp 335-338.  
JPRS 43115

The New Central Office of the National Power Dispatching System, 6 pp.  
ROMANIAN, per, Energetica, Vol 15, No 8, Aug 1967, pp 355-359.  
JPRS 43115

Solar Heat through a Window, by G. Brown, 19 pp.  
SWEDISH, per, Tidskr. Varmer, Vent.- Sanitetstek., No 2, 1966, pp 57-67. P911338367  
ABC NP-Tr-1506

North Vietnam's Capacity to Build Medium and Small Hydro-Electric Power Stations, by Loan Minh Hoa, 10 pp.  
VIETNAMESE, per, Tin Tục Boat Dong Hoa Soc., No 3, Mar 1967, pp 4-12.  
JPRS 43121



Scientific  
Materials

Thermokinetic Diagram and Quenching Curves, Structure and Properties of Actual Components [From Heat Treating Practice], by K. F. Starodubov.  
RUSSIAN, per, Dopovidi Akad Nauk UkrRSR, No 6, 1966, pp 774-778.  
HB 7310

Theory of the Thermal Conductivity of Metals with Crystals Structure Defects, by A. M. Ermolayev.  
RUSSIAN, per, Fizika Metallov i Metallovedenie, Vol 23, No 5, 1967, pp 813-818.  
\*NASA TT F-11,418

Carbaboride Phases in Alloy Steels, by N. F. Iashko.  
RUSSIAN, per, Issled. po Zharoproch. Slav. AN SSSR Inst. Met. Im. A. A. Baikova, Vol 7, 1961, pp 112-121.  
NLL 9022.4 (66/149)

The Polarographic Determination of Nitrites in Sausage Goods, by O. M. Mukhamed-Nazarova.  
RUSSIAN, per, Izv. AN Mold. SSR, No 10, 1962, pp 61-66.  
NLL 5828.4F (5965)

Selective Isolation of Intermetallic Compounds from Multi-Component Three-Phase Alloys, by R. B. Galubtsova.  
RUSSIAN, per, Izv. AN SSSR Metall., No 1, 1966, pp 136-138.  
NLL 9022.4 (66/113)

Optimum Rigidity and Elastic Deformations of the Rolls in Four High Mills, by V. P. Polukhin.  
RUSSIAN, per, Izv VUZ Chern Met., No 1, 1965, pp 78-84.  
\*BISI 5994

The Optimum Permeability of a Sinter Charge, and Fuel Combustion Conditions, by G. G. Efimenko.  
RUSSIAN, per, Izv VUZ Chern Met., No 6, 1966, pp 41-45.  
\*BISI 5991

Scientific  
Materials (Contd)

Oxidation Resistance of 20% Cr-80% Ni Alloy Containing Lanthanum and Cerium, by E. G. Ivanov.  
RUSSIAN, per, Izv. VUZ Chern. Met., Vol 9, No 7, 1966, pp 77-79.  
NLL 9022.4 (66/329)

Effect of Deformation on the Intergranular Corrosion of 18/8 Stainless Steel, by G. K. Shraiber.  
RUSSIAN, per, Izv. VUZ Chern. Met., Vol 9, No 7, 1966, pp 114-118.  
NLL 9022.4 (66/328)

Effect of Steel Composition on Life of Gear Transmissions, by V. P. Antropov.  
RUSSIAN, per, Izv. VUZ Chern. Met., Vol 9, No 10, 1966, pp 128-135.  
NLL 9022.4 (66/374)

Work Hardening Followed by Heat Treatment of Constructional Steels, by I. N. Kidin.  
RUSSIAN, per, Izvest VUZ- Chern Met., No 11, 1966, pp 118-122.  
HB 7257

The Effect of the Slag Formation Zone on the Gas Permeability of the Burden, by N. G. Akhanek and O. P. Onorin.  
RUSSIAN, per, Izv. VUZ Chern Met., No 2, 1967, pp 29-31.  
\*BISI 6032

The Behaviour of Nitrogen in the Period of Blowing the Hot Metal with Oxygen Through a Lance in Producing Low Carbon Steel, by A. I. Kholodov.  
RUSSIAN, per, Izv VUZ Chern Met., No 6, 1967, pp 60-64.  
\*BISI 5990

Twist Determination in Synthetic Staple Fibres, by N. V. Davina and M. V. Kazakova.  
RUSSIAN, per, Khim. Volokna, No 3, 1963, pp 55-57.  
NLL 5828.4F (5966)

The Alloying of Nimonic Type Alloys With Boron, by B. I. Medovar.  
RUSSIAN, per, Kovova Materialy, Vol 4, No 1, 1966, pp 55-63.  
NLL 9022.4 (66/147)

Scientific  
Materials (Contd)

Research on the Durability of a Series of Paint and Varnish Coatings During Ageing, by E. A. Kanevskaya and I. V. Elisavetskaya.  
RUSSIAN, per, Lakokrasochnye Materialy i Ikh Primenenie, No 6, 1966, pp 37-40.  
\*EESI 5989

Initiiertes Kracken von Propan-Butan-Gemischen, by A. D. Stepukhovich.  
RUSSIAN, per, Neftekhimiya, Vol 3, No 4, 1963, pp 531-540.  
NLL 5413.2835 (Nul-tr-16)

Electric Fields in the Flow Channels of Magneto-Hydrodynamic Installations, by A. B. Vatakhin and S. A. Regirer.  
RUSSIAN, bk, Supplement to Teoriya Elektromagnitnogo Izmereniya Raskhoda, 1965.  
NLL RTS 3615

The Possibility of Replacing Nickel by Manganese in Two-Phase Stainless Steel, by A. P. Gulyaev and T. A. Zhadan.  
RUSSIAN, per, Sb. Trudov. Tsentr.-i Inst. Chern. Met., No 39, 1965, pp 109-111.  
NLL 9022.4 (66/126)

The Classification of Components and Numbering Systems., by K. Vetrovec.  
RUSSIAN, per, Stroitel'stvi, Vol 15, No 11, 1965, pp 860-862.  
NLL 6075.461 (1853)

Reducing the Siren Noise of Axial Turbo-machinery, by Z. Koravec.  
RUSSIAN, per, Stroitel'stvi, Vol 16, No 7, 1966, pp 491-495.  
NLL 6075.461 (1864)

The Similarity of the Characteristics of the Combustion Process, by A. M. Gurchich and Ya. P. Storozhuk.  
RUSSIAN, per, Teploenergetika, No 2, 1954, pp 44-48.  
NLL 9022.09 (4408)

Scientific  
Materials (Contd)

Heat-Resistant Steels for Heat and Power Engineering, by I. R. Kryanin, I. L. Mirkin and L. P. Trusov, 12 pp.  
RUSSIAN, per, Teploenergetika, No 9, Sept 1967, pp 2-5.  
JPRS 43083

A Fast-Response Automatic Gas Protection System, by V. K. Perepelitsa.  
RUSSIAN, per, Trudy Vok NII, Vol 17, 1965, pp 326-341.  
NLL 8313.4 (5355)

An Analysis of the Fire Hazard of a Combined System of Working, Using Flexible Metal Canopies, by A. B. Zakharov and V. G. Igishev.  
RUSSIAN, per, Trudy Vost NII, Vol 6, 1965, pp 115-124.  
NLL 8313.4 (5382)

Study of Diaphragms From Ion-Exchange Materials During the Electrorefining of Nickel, by O. P. Kalganova.  
RUSSIAN, per, Tsvetnye Metally, Vol 38, No 12, 1965, pp 40-44.  
NLL 9022.4 (66/184)

Automation of a Laboratory Installation for the Extraction Purification of Nickel Electrolyte, by L. I. Shvartsev.  
RUSSIAN, per, Tsvetnye Metally, Vol 39, No 9, 1966, pp 40-41.  
NLL 9022.4 (66/381)

The Structure of Metallic Fusions, by A. A. Samarin, 5 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 59-62.  
JPRS 43071

Liquid Metals and Their Properties, by I. I. Novikov and A. N. Solov'yev, 5 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 63-67.  
JPRS 43071

Choice of White Cast Irons for Operation Under Abrasive Wear Conditions, by B. A. Volnov and M. G. Gedberg.  
RUSSIAN, per, Vestnik Mashinostroyeniya, Vol 46, No 10, 1966, pp 49-50.  
NLL 9022.4 (66/391)

Scientific  
Materials (Contd)

Multi-Layer Deposits for the Protection of Springs in Water High Parameters, by F. S. Pavlova and V. N. Kuznetsova.  
RUSSIAN, per, Zashchita Metalloy., Vol 2, No 5, 1966, pp 545-549.  
NIL 9022.4 (66/326)

Raising the Adhesion Strength of Metallic Deposits by Means of Prior Passivation, by L. I. Kad-  
aner.  
RUSSIAN, per, Zh. Prikl. Khim., Vol 39, No 9, 1966, pp 1956-1959.  
NIL 9022.4 (66/371)

The Development of Highly Hypereutectoid Alloy Steels for Section Rolls, by R. Kudrna.  
CZECH, per, Hutn Listy, No 10, 1966, pp 712-720.  
\*BISI 6012

The Technical Applications of Low Temperatures to Metals and Their Alloys, by J. J. de Jong.  
DUTCH, per, Electro-Techniek, Vol 38, 7 July 1960, pp 355-361.  
\*BISI 6004

Degree of Colour Differences in Coil Coating Finishes, by A. C. Biesheuvel.  
DUTCH, per, Verfchromiek, Vol 40, May 1967, pp 167-175.  
\*BISI 5988

Study of the Potentiostatic Deposit in a Thin Layer of Iron-Nickel Alloys, by J. Guitten and J. Valignat.  
FRENCH, per, Comptes Rend., Vol 264, Series C, 17 Apr 1967, pp 1348-1351.  
\*BISI 5995

An Interesting Method of Studying Corrosion in Steel, by A. Hache.  
FRENCH, per, Corros Anticorros, Vol 13, Apr-May 1967, pp 123-125.  
BISI 5914

Ultra-High Strength Steels in the French Aero-space Industry, by D. Douillet.  
FRENCH, per, Met Constr Mecan, Vol 99, Mar 1967, pp 169-176.  
BISI 5821

Scientific  
Materials (Contd)

Comparative Study of Methods Used for Measuring Residual Stresses in Metals, by P. Grevier.  
FRENCH, per, Met -Corros -Ind, Jan 1967, pp 31-47.  
\*BISI 6003

Regulation of Coke-Oven Temperature with Height as Applied to Two Batteries at the Drocourt Coking Plant, by S. Dalessard.  
FRENCH, per, Rev Gen Therm, Jun 1967, pp 839-846.  
BISI 5887

Forging of Disks by Upsetting, by M. Kroneis.  
FRENCH, per, Revue de Metallurgie, Vol 59, No 11, 1962, pp 954-958.  
HB 6989

Yield Points and Creep at Room Temperature in Austenitic Stainless Steels, by R. Castro and J. J. de Cadenet.  
FRENCH, per, Rev Met, Vol 63, Oct 1966, pp 803-814.  
BISI 5392

Results of Laboratory Experiments on the Application of Non-Destructive Testing to Heavy Steel Parts, by P. Bastien.  
FRENCH, per, Soud Techn Connexes, Vol 21, Mar-Apr 1967, pp 93-108.  
\*BISI 6010

Investigation of the Zone of Existence of Iron Carbides with the Aid of Electron Microscopy and Electron Diffraction, by H. Schenck.  
GERMAN, per, Arch. Eisenh., Vol 37, Apr 1966, pp 341-352.  
\*BISI 6022

Effect of Aluminium on the Damping and Solubility of Carbon in Alpha-Iron, by W. Janiche.  
GERMAN, per, Arch. Eisenh., Vol 37, 1966, pp 719-728.  
BISI 5645

Calculation of the Roll Force and Torque Required in Rolling Strip at Elevated Speeds of Formation, by A. Troost.  
GERMAN, per, Arch. Eisenh., Vol 38, Mar 1967, pp 191-197.  
\*BISI 6017

Scientific  
Materials (Contd)

Reduction of Wustite by Hydrogen-Water Vapour and Carbon-Monoxide Carbon-Dioxide Mixtures, by E. Riecke.

GERMAN, per, Arch Eisenh., Vol 38, No 4, 1967, pp 249-255.  
\*BISI 6011

Measurement of the True Temperature by Means of Radiation Pyrometers and Determination of the Emissivity of Steel Melts, by F. Lieneweg and K. Menge.

GERMAN, per, Arch Eisenh., Vol 48, Mar 1967, pp 199-209.  
\*BISI 6018

Effect of Defects on Boiler Tube Performance in Service and Their Ultrasonic Evaluation, by H. -J. Meyer.

GERMAN, per, Bänder, Bleche, Rohre, Vol 8, No 2, 1967, pp 76-83.  
HB 7265

The State of Development of Cold Roll Forming, by G. Weimar.

GERMAN, per, Bänder Bleche, Vol 8, May 1967, pp 308-324.  
BBI 5863

The Corrosion-Resistance of Chromium Steel for Automobile Trim Components, by W. Kesternich.

GERMAN, per, Bänder Bleche, Vol 8, No 8, 1967, pp 545-549.  
\*BISI 5999

On the Hot Working of Steel in Temperature Range A<sub>01</sub>, by K. Kroneis and E. Krainer.

GERMAN, per, Berg- und Hütten Monatsh., Vol 111, Nov 1966, pp 523-534.  
\*BISI 5987

Continuous Bath Temperature Measurement in an LD Vessel and Knowledge Gained for Steelmaking Practice, by R. F. Rinesch and G. Strohmeier.

GERMAN, per, Berg- und Hütten Monatsh., Vol 112, No 1, 1967, p 107.  
\*BISI 6019

Modern Weld Joint Preparation, G. Mickolai.

GERMAN, per, Elech, Sep 1967, VIII/15-16.  
\*BISI 6023

Scientific  
Materials (Contd)

Studies Relating to the Heat-Treatment of Alloyed Sintered Steels Containing Copper and Nickel as Alloying Additions, by G. Napf.

GERMAN, per, Forschungsber. Nordrhein-Westfalen, No 1745, 1966, p 41.  
\*BISI 5985

Investigations of the Melt Sump Formation in Remelting in the Electron-Beam Multichamber Furnace Using a Mathematical Model to Calculate the Temperature Distribution in the Melted Material, by F. Esser, G. Scharf.

GERMAN, per, Frieberger Forschungshefte, Series B, No 122, 1966, pp 67-76.  
HB 7193

Influence of Section Size on Primary Structure and Mechanical Properties of Plain and Alloy Steel Castings, by H. L. Roes and W. Witte.

GERMAN, per, Giesserei, Vol 54, Apr 27, 1967, pp 225-235.  
\*BISI 6027

The Influence of Tramp Elements on Structure and Properties of S. G. Iron Castings Produced Using Sand or Permanent Moulds, by J. Mots and K. Orths.

GERMAN, per, Giesserei-Forschung, Vol 19, No 3, 1967, pp 109-124.  
\*BISI 6026

Development of Cast Iron Having Special Characteristics, 1 - Mechanical Properties of Pure Iron-Carbon-Silicon Alloys, by B. Lux.

GERMAN, per, Giesserei-Forschung, Vol 19, No 3, 1967, pp 141-149.  
\*BISI 6025

The Distribution of Deformation After Pressing, by H. Buhler and D. Bobbert.

GERMAN, per, Industrie Anzeiger, Vol 88, No 100, 1966, pp 309-312.  
\*BISI 5986

The Milling of Ingot Moulds.

GERMAN, per, Klenzle Fachber., Vol 75, Mar 1967, pp 179-181.  
\*BISI 5992

Scientific  
Materials (Contd)

The Carbido-Thermic Preparation of Metallic Vanadium Metal and Vanadium Alloys, by Dr. R. Kieffer, Dr. H. Back, 16 pp.  
GERMAN, per, Metall, Vol 21, No 1, 1967, pp 19-22. P911336467  
AEC IS-Trans-61

Diffusion in Multiphase Alloy Systems, by Theo Heumann, 28 pp  
GERMAN, per, Metallkunde, Vol 58, 1967, pp 168-174. P911354367  
AEC LA-Tr-67-75

Thermometric Determination of Impurities in Metals, by I. Sap and B. Sipos.  
GERMAN, per, Mikrochim Acta, No 3, 1967, pp 248-268.  
\*BISI 5993

Investigations into the Corrosion Resistance of a 13% Chromium Steel in Aqueous Salt Solution, by H. Willert.  
GERMAN, per, Neue Hütte, Vol 11, Jun 1966, pp 372-377  
\*BISI 6029

Precision Casting in Maraging Nickel-Cobalt-Molybdenum Steel, by E. G. Nickel and H. W. Weinmann.  
GERMAN, per, Paper Presented to 12th European Investment Casters' Conference, 1967, p 5.  
\*BISI 6000

Contrast Phenomena of Dislocation Pairs in Nickel-Aluminum Alloys with a Coherent Precipitation of Ordered Regions, by M. Wilkens and E. Hornbogen, 18 pp.  
GERMAN, per, Phys. Stat. Sol., No 4, 1964, pp 557-568. P911354467  
AEC IS-Trans-69

Heavy-Current Welding Under Shielding Cases, by W. Hammitzsch.  
GERMAN, per, Schweißtechnik, Vol 16, No 9, 1966, pp 405-409.  
\*HB 7284

Laws Controlling the Distribution of Nitrogen Between Pig Iron and Slag in the Blast Furnace, by E. Schürmann.  
GERMAN, per, Stahl Eisen, Vol 87, 1 Jun 1967, pp 645-654.  
\*BISI 6021

Scientific  
Materials (Contd)

Changes in Pellet Properties with Increasing Degree of Reduction, by H. Schenck, A. Majdic.  
GERMAN, per, Stahl und Eisen, Vol 87, No 18, 1967, pp 1065-1070.  
HB 7263

Ultrasonic Testing of Hot and Cold Rolled Strip, by H. J. Kopineck.  
GERMAN, per, Stahl Eisen, Vol 87, No 20, 1967, pp 1198-1201.  
\*HB 7283

Possibilities for the Manufacture of Age-Resistant Steel with Boron, by H. Menne and W. Weinreich.  
GERMAN, per, Techn Mitt, Vol 56, No 10, 1963, pp 396-403.  
BISI 5803

New Results of Research on the Flow of Materials in the Plastic Deformation of Metallic Materials, by H. Vater.  
GERMAN, per, Techn Mitt, Vol 59, Oct 1966, pp 500-507.  
\*BISI 6028

Model Tests on the Krupp Minimum Gas Process as Applied to the Oxygen Blown Converter, by A. H. Kluth and J. Maatsch.  
GERMAN, per, Techn Mitt Krupp Forschungsber., Vol 24, No 4, 1966, pp 165-172.  
\*BISI 6016

The Iron (II) Oxide - Calcium Oxide - Magnesium Oxide System as a Basis for Determining the Slagging of Dolomite, by G. Tromel.  
GERMAN, per, Ironindustrie-Zeitung, Vol 90, No 5, 1966, pp 193-209.  
\*BISI 6002

Welding of Spheroidal Graphite Cast Irons, by W. Hammitzsch.  
GERMAN, per, Werkstatt Betrieb, Vol 100, No 6, 1967, pp 437-442.  
\*HB 7285

Lattice Defects in Single Crystals of Coarse-Grained Polycrystalline Iron Specimens During Tensile Deformation, by F. Bollenrath.  
GERMAN, per, Z Metallk., Vol 58, No 5, 1967, pp 328-330.  
\*BISI 6006

Scientific  
Materials (Con'd)

Solution, Precipitation and Hardening Effect of Niobium in Unalloyed Steel, 1 - Solution and Precipitation of Niobium Carbonitride in Austenite, by L. Meyer.

GERMAN, per, 2 Metallk., Vol 58, No 5, 1967, pp 334-339.

\*BISI 6009

The Calculation of Roll Pressure, Torque and Performance During Hot Rolling in Shaped Grooves, by M. Voith.

HUNGARIAN, per, Koh Lapok, Vol 100, No 4, 1967, pp 145-150.

\*BISI 6001

Analysis of the Demand for Structural Steel, by Karoly Kassanyi, 33 pp.

HUNGARIAN, per, Muszkai Elet., Vol 22, No 18, 7 Sep 1967, pp 9-15.

JPRS 43247

Wide Strip Rolling Mill Under Construction, 7 pp.

HUNGARIAN, per, Muszkai Elet., Vol 22, no 18, 7 Sep 1967, pp 26 and 27.

JPRS 43247

The Ingot Mould Foundry at Trieste, by C. Mitri.

ITALIAN, per, Roll Techn FINSIDERZ, Jul 1967, pp 479-486.

\*BISI 6024

The Electrical Equipment for Shears for Hot Rolling, by L. Pasolini.

ITALIAN, per, Roll Techn Finsider, Feb 1967, pp 15-87.

\*BISI 6033

A Study of the Nitrides in Boron Steels by Isolation of Non-Metallic Phases, by S. Maneschi and A. E. Becaria.

ITALIAN, per, Met Ital., Vol 58, No 11, 1966, pp 417-422.

\*BISI 6013

Analysis of the Open Hearth Process by Means of "Multiple Correlations in Cascade" on the Operational Data, by S. Betti.

ITALIAN, per, Met Ital., Vol 59, No 2, 1967, pp 47-58.

\*BISI 6014

Scientific  
Materials (Con'd)

Contribution to the Study of the Influence of Al and N on the Susceptibility to Crack Formation of Medium-Carbon Steel Ingots, by E. Colombo and B. Cesari.

ITALIAN, per, Met Ital., Vol 59, No 2, 1967, pp 71-75.

\*BISI 6008

Factors Influencing Crack Formation in Rolling Slabs of Killed Mild Steel and Means for Improving Their Surface Quality, by M. Mazzanti.

ITALIAN, per, Met Ital., Vol 59, No 2, 1967, pp 108-115.

\*BISI 6015

The Present Position Concerning the Research and Experiments Carried Out With the Object of Introducing Standard Automatic Couplings on the European Railways, by M. Cirillo.

ITALIAN, per, La Technica Professionale Movimento e Commerciale, Oct 1966, pp 181-187.

\*BISI 5998

Corrosion of Iron in High Temperature and Pressure Water. 1. The Corrosion Rate and the Structures of Product Films, by T. Mukaibo.

JAPANESE, per, Danki Kagaku, Vol 33, No 8, 1965, pp 576-583.

NIL 9022.09 (4412)

The Effects of Deformation on the Hot Workability of Heat Resisting Steels, by T. Ito and T. Matanabe.

JAPANESE, per, Danki-Seiko, Vol 37, Sep 1966, pp 199-207.

\*BISI 6031

Cold Forging Today, by H. Kudo.

JAPANESE, per, J Jap Soc Mech Eng., Vol 67, Mar 1964, pp 378-385.

\*BISI 5996

Diffusion of Carbon in Tantalum, by F. Son, S. Ihara, 10 pp

JAPANESE, per, Nippon Kinzoku Gakkaishi, Vol 30, 1966, pp 1137-1140. F911354267

AEC LA-Tr-67-71

Scientific  
Materials (Contd)

The Workability of Stainless Chrome-Nickel Steels Stabilized with Titanium, by J. Jezek and J. Rainezhova.  
POLISH, per, Hutnicke Listy, No 2, 1966, pp 108-112.  
NLL 9022.4 (66/165)

Optimum Pouring Temperatures for Cast Steel Die Casting of Forging Dies, by Z. Durmala.  
POLISH, per, Prz Odlew, Vol 16, No 11-12, 1966, pp 21-22.  
\*BISI 5997

Investigation of the Resistance to Deformation of Metals, by G. Wallquist.  
SWEDISH, per, Jernkon Ann, Vol 135, No 6, 1951, pp 197-218.  
\*BISI 6030

Measurement of Residual Stresses by Means of X-Ray Diffraction, by G. Alpsten and P. Spiegelberg.  
SWEDISH, per, Jernkon Ann, Vol 141, No 1, 1967, pp 62-83.  
\*BISI 6007

Mathematical Sciences

Generalization of the Bubnov-Galerkin-Kantorovich Method for the Approximate Solution of Boundary Value Problems, by A. I. Vaindiner, 11 pp.  
RUSSIAN, per, Vestn. Mosk. Univ., Ser. I, Mat. Mekh., No 2, 1967, pp 101-109. P911353867  
AEC ANL-Trans-480

Investigation into a Mathematical Theory of the Kinetics of Coagulation of Colloidal Solutions, GERMAN, per, Zeitschrift fur Physik, Chemie, No 92, pp. 129-168. P94437467  
NSTIC 1326

Scientific  
Mechanical, Industrial, Civil & Marine Engineering

Description of Three New Motor Vehicles, by A. Alyshev, 8 pp.  
RUSSIAN, per, Avtomobilnyy Transport, No 8, Aug 1967, pp 31-33.  
JPRS 43128

The Conversion of Boilers to Natural Gas Firing, by G. I. Zemlyanski.  
RUSSIAN, per, Elektricheski Stantsii, Vol 29, No 5, 1958, pp 17-28.  
NLL 9022.09 (4436)

Transducer to Measure the Dewpoint of Boiler Flue gases, by Yu. N. Novozhilov.  
RUSSIAN, per, Elektricheski Stantsii, Vol 37, No 1, 1966, pp 79-80.  
NLL 9022.09 (4492)

Pulsating Blast as a Method for Regulating Blast Furnace Operations, by V. A. Sorokin.  
RUSSIAN, per, Izv VUZ Chern Met, Vol 10, No 3, 1967, pp 33-36.  
\*BISI 6005

The Slipping of Knife Edges of Pendulums and Scales, by A. A. Korobitsin.  
RUSSIAN, per, Izv. VUZ Priborostroenie, Vol 6 No 6, 1963, pp 104-113.  
NLL RTS 3193

Pitting and Crevice Corrosion of Stainless Steels in Sea Water, by M. N. Fokin.  
RUSSIAN, per, Korroziya Metal. i Splavov, No 2, 1965, pp 315-331.  
NLL 9022.4 (66/327)

Problems of the Theory of Deformability of Binding Soils, by S. S. Vyalov.  
RUSSIAN, per, Osnovaniya, Fundamenty i Mekh. Guntov, No 3, 1966, pp 1-4.  
NLL 5828.4F (12141)

Elastic Compression of Rolls in the Rolling of Metal Powders, by V. P. Katsbinskii and G. A. Vinogradov.  
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 7, No 7, 1967, pp 37-41.  
HB 7309

Scientific  
Mechanical, Industrial, Civil & Marine Engineering (Contd)

Methods of Experimental Investigation of the Specific Forces in the Rolling of [Metal] Powders, by V. A. Spinov and G. A. Vinogradov. RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 7, No 9, Sep 1967, pp 1-5. HB 7298

The Plastic-Elastic Problem of a Heavy Mass Having a Vertical Cylindrical Opening, by K. N. Shevchenko, 10 pp. RUSSIAN, per, Prikl. Mat. Mekh., Vol 14, 1950, pp 587-592. P911355167  
AEC NP-Tr-1571

On Optimum Trawling Speeds, by V. N. Chestnoi. RUSSIAN, per, Rybnoe Khozvaistvo, Vol 37, No 7, 1961, pp 43-49.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Corrosion of Building Structures in Fish-Processing Plants, by A. V. Chuiko and A. P. Proshin. RUSSIAN, per, Rybnoe Khozvaistvo, Vol 42, No 9, pp 57-60.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Some Indices of the Operation of "Gotaverken" Engines, by G. F. Levshin. RUSSIAN, per, Rybnoe Khozvaistvo, Vol 43, No 3, 1967, pp 14-15.  
Dept of Interior  
Fish and Wildlife Service  
BCF, Bureau of Foreign Fisheries

Pipe Steels for Power Machine Building, by K. A. Lanskaya, 13 pp. RUSSIAN, per, Teploenergetika, No 9, Sept 1967, pp 5-9. JPRS 43083

Experimental Investigation of Deterioration Conditions of Heat Transfer in Flow of Steam and Water Mixture in Heated Pipes, by A. S. Kon'kov, 17 pp. RUSSIAN, per, Tr. Tsentr. nauch.-issled. proek-konst kotloturbinnogo inst, Vol 58, 1965, pp 170-178. P911353567  
AEC NP-Tr-1522

Small Water-Cooled Diesel Engines, 7 pp. CHINESE, per, Nung-veh Chi-hsieh Chi-shu, No 2, 1966, pp 12-13. JPRS 43252

Scientific  
Mechanical, Industrial, Civil & Marine Engineering (Contd)

The Titan Rotatable Fork Left. CZECH, per, Technicka Prace, No 7, 1967, p543  
\*ACSI J-3550  
ID 2204049467

Palettes with Drive. CZECH, per, Technicka Prace, No 7, 1967, p 544.  
\*ACSI J-3550  
ID 2204049467

Advances in the Field of Elast Furnaces and Hot Metal Production in Japan, by G. Warynski. FRENCH, per, C.D.S. Circ, Vol 24, No 5, 1967, pp 1207-1234.  
\*BISI 6020

Construction of Annaba Steel Complex, 5 pp. FRENCH, mp, El Moudjahid, 19 Sept 1967, p. 3. JPRS 43074

Ultracentrifuge with Magnetically Suspended Rotor Driven by a Magnetic Rotating Field, 9 pp. GERMAN, Patent No-1,187,400  
P911364967  
AEC K-Trans-24

Practical Experience in the Ultrasonic Examination of Heavy Rotor Forgings and Possible Ways of Improving the Reliability of Interpretation by Automation, by W. Mohr. GERMAN, per, Materialprufung, Vol 9, No 3, 1967, pp 73-80. HB 7230

Radiometric Determination of Coke Moisture-Content, A Further Step in the Rationalisation and Automation of the Elast Furnace Process, by J. Holzhey and J. Schwaralose. GERMAN, per, Neue Hütte, Vol 12, Jun 1967, pp 325-330. BISI 5864

The Use of Hollow Electrodes in Large Electric Arc Furnaces, by F. Harms and K. Frobrodt. GERMAN, per, Stahl Eisen, Vol 85, 28 Jan 1965, pp 72-77. BISI 5795

Operation of D. C. Reversing Mill Motors with Elevated Constant Current During Acceleration and Braking, by J. Heiderpriem. GERMAN, per, Stahl Eisen, Vol 86, Dec 15, 1966, pp 1654-1667. BISI 5510



Scientific  
Mechanical, Industrial, Civil & Marine Engineering (Contd)

Utilisation and Assessment of Blast Furnace Gas in the Present Situation of the Fuels Market, by W. Risse.  
GERMAN, per, Stahl Eisen, Vol 87, 30 Apr 1967, pp 442-449.  
BISI 5804

Mechanical Twinning in Copper-Rich Solid Solutions, by Eberhard Peissker, 26 pp.  
GERMAN, per, Z. Metallk., Vol 56, 1965, pp 155-164. P911355967  
AEC ORNL-Tr-1753

An Example of Design Data of Marine Propeller by Using the High-Speed Digital Computer IBM 7090, by R. Washimi.  
JAPANESE, per, Kansai Zosen Kyokai-Shi, No 111, 1963, p 40.  
NLL 9022.065 (2459)

The Deformation of Ship's Hull Under Construction (5), by M. Oda and N. Kazuura.  
JAPANESE, per, Zosen Kyokai Ronbunshu, Vol 118, 1965, pp 358-.  
NLL 9022.065 (2375)

Worm Drive Vehicle, Its Theory of Operation, Basic Theoretical Computations and Results of Tests, by A. Soltynski.  
POLISH, per, Technika Motoryzacyjna, No 8, 1967, pp 225-231.  
\*ACSI J-3712  
ID 2204052667

Dynamics of Tracked Vehicle Motion, by Z. Burdzinski.  
POLISH, per, Technika Motoryzacyjna, No 8, 1967, pp 240-246.  
\*ACSI J-3712  
ID 2204052667

A Special 24-Axle Railroad Car for Transport of Heavy Equipment, by Stevan Markovic, 32 pp.  
SERBO-CROATIAN, per, Technika, no 9, Sep 1967, pp 1633-1645.  
JPRS 43044

Scientific  
Methods & Equipment

Organization of Specialized Tractor Repair Enterprises, by N. Davidenko, 7 pp.  
RUSSIAN, per, Tekhnika v Sel'skom Khozyaystvo, no 8, Aug 1967, pp 75-77.  
JPRS 43128

Photographic Pyrometry, by Yu. P. Shramko.  
RUSSIAN, per, Teplofizika Vysokikh Temperatur, Vol 5, No 2, 1967, pp 367-372.  
\*NASA TT F-11,407

Information Processing in the Functional Visual Field, by A. F. Sanders.  
DANISH, rpt, Institute for Perception RVO-TNO, Report IZF 1967-6, Soesterberg, 1967, 14 pp.  
\*NASA TT F-11,408

The Investigation of a Principle Applicable to a High Sensitivity Accelerometer, by Michel Gay, 12 pp.  
FRENCH, per, La Recherche Aerospatiale, Jan/Feb. 1966 No. 110, pp 39-44  
P944347167  
TIL 1174

The Amount of  $\beta$ -Self-Absorption in  $^{3H}$  Autoradiography, by W. Maurer and E. Frimbsch, 10 pp.  
GERMAN, per, Exp. Cell Res., Vol 33, 1964, pp 8-18. P911337067  
AEC AERE-Trans-1067

Navigation, Communication, Detection &  
Countermeasures

All-Union Television Center to Open Soon, by L. S. Maksakov, 7 pp.  
RUSSIAN, per, Gorodskoye Khozyaystvo Moskvy, No 7, Jul 1967, pp 14-17.  
JPRS 43232

Technology of Televising Motion Pictures, by V. A. Burgov, 20 pp.  
RUSSIAN, per, Tekhnika Kino i Televideniya, No 9, 1967, pp 5-12.  
JPRS 43084

The ChVT-1 Equipment and Its Operating Experience, 12 pp.  
RUSSIAN, per, Vestnik Svyazi, No 7, July 1967, pp 3-7.  
JPRS 42951

Scientific  
Navigation, Communications, Detection &  
Countermeasures (Contd)

A 15-Second Delaying Device, 6 pp.  
RUSSIAN, per, Vestnik Svyazi, No 7, July 1967,  
pp 7-8.  
JPRS 42951

Some Ways of Improving the Stability of Short-  
wave Communications, by Khr. Videkov, 6 pp.  
BULGARIAN, per, Armeyski pregled, No 8, Aug  
1967, pp 101-104.  
JPRS 42936

Trends in Telephone Transmissions and Exchanges,  
by G. Rehbein, 13 pp.  
GERMAN, per, Der Fernmelde-Praktiker, Vol 7,  
No 8, Aug 1967, pp 171-175.  
JPRS 43201

Israel to Install Advanced Telephone Control  
Center, by M. Yesod, 5 pp.  
HEBREW, np, Lamethav, 10 Sept 1967, p. 3.  
JPRS 42949

The Telecommunications Network of the National  
Power Dispatching System, by A. Boboc, D. Ioanin,  
9 pp.  
ROMANIAN, per, Energetica, Vol 15, No 8, Aug  
1967, pp 347-351.  
JPRS 43115

Transmission of Telemechanics in the National  
Power Dispatching System, by Gabriel Isaac, Suzette  
Marcu, 10 pp.  
ROMANIAN, per, Energetica, Vol 15, No 8, Aug  
1967, pp 351-355.  
JPRS 43115

Nuclear Science & Technology

The Use of SGD-8 Glass Dosimeters for - Radiation  
from the IGR Pulse Reactor, by S. A. Sharoyko,  
22 pp.  
RUSSIAN, per, Atomnaya Energiya, Vol 21, No 3,  
1966, pp 218-19.  
Dept of Navy ONI tr 2420

Nuclear Research Production and Use of Isotopes  
in Belgium and the Netherlands, by Ye. Mamonov,  
22 pp.  
RUSSIAN, per, Atomnaya Energiya, Vol 21, No 3,  
1966, pp 224-28.  
Dept of Navy ONI tr 2420

Scientific  
Nuclear Science & Technology (Contd)

International Theoretical Physics Center in  
Trieste, by V. G. Solov'yev, 22 pp.  
RUSSIAN, per, Atomnaya Energiya, Vol 21, No 3,  
1966, pp 228-229.  
Dept of Navy ONI tr 2420

Tenth Anniversary "Atoms for Peace" Exhibition,  
by V. Mikhaylin, 22 pp.  
RUSSIAN, per, Atomnaya Energiya, Vol 21, No 3,  
1966, pp 228-230.  
Dept of Navy ONI tr 2420

Canadian Scientists in the USSR, 22 pp.  
RUSSIAN, per, Atomnaya Energiya, Vol 21, No 3,  
1966, p 231.  
Dept of Navy ONI tr 2420

Experimental Methods and Conditions for  
Irradiation of Materials, by S. T. Konobeyevskiy,  
59 pp.  
RUSSIAN, bk, Deystviye Oblucheniya na Materialy,  
1967, pp 44-86.  
JPRS 43250

The Stability of Chapman-Jouguet Detonations,  
by V. V. Pukhnachev, 7 pp.  
RUSSIAN, per, Kokl. Akad. Nauk SSSR (Gidromek-  
hanika), Vol 149, No 4, Apr 1963, pp 798-801.  
P911336267  
ABC SC-T-67-0941

Determination of the Fragmentation Parameters  
of the Multi-Charge Component of Primary Cosmic  
Rays, by Yu. F. Gagarin, N. S. Ivanova.  
RUSSIAN, per, Kosmicheskiye Issledovaniya, Vol  
5, No 3, 1967, pp 450-455. P910383767  
Sci Tech Info Facility  
ST-CR-NP-10656

Diffusion Interaction through Contact between  
Materials and Their Cladding, 17 pp  
RUSSIAN, rpt, Thermodyn., Proc. Symp., Vol II,  
July 22-27 1965, pp 161-172 P911303467  
ABC LA-Tr-67-31

Critical Assembly for Studying "Pure" Uranium-  
Water Lattices, by A. A. Krasin, L. A. Ianilevich,  
9 pp.  
BELARUSSIAN, per, Vesti Akademii Nauk Belarus-  
skoy SSR, No 4, 1966, pp 12-16.  
JPRS 43049

Scientific  
Nuclear Science & Technology (Contd)

Calculation of Forces Acting on an Impurity in a Metal Subjected to a Temperature Gradient, by Maurice Gerl.  
FRENCH, rpt, Commissariat a l'Energie Atomique, Saclay. Section de Recherches de Metallurgie Physique, Dec 1966, 47 pp.  
\*NASA TT F-11,409

Study of Uranium and Plutonium Nitrides and Their Solid Solutions, by F. Anselin, 40 pp.  
FRENCH, per, J. Nucl. Mater., Vol 10, 1963, pp 301-320. P911354667  
AEC ORNL-TR-1728

Characteristics of Neutrons and Neutron Sources with Regard to Biological Applications, by Y. van der Feer, 11 pp.  
GERMAN, per, Atomenergie, June 1966, pp 122-129. P944372967  
NSTIC 1840

X-Ray Determination of Short-Range Order in Binary Alloys, by A. Munster and K. Sagel, 25 pp.  
GERMAN, per, Z. Phys. Chem, Vol 12, 1957, pp 145-167.  
P911338667  
AEC ORNL-TR-1733

Survey of Scientific Research Projects under Contract with the Federal Commission for Nuclear Energy Received As of 31 May 1967, 46 pp.  
SERBO-CROATIAN, per, Nuklearna Energija, 1967, No 2, pp 25-31; No 3, pp 29-32.  
JPRS 43215

Physics

On the Hydrodynamic Equation for a Superfluid, by N. N. Bogolyubov.  
RUSSIAN, bk, Dokl., 1963.  
NLL RTS 3410

Theory of the Energy Spectrum and Properties of Metals with Impurities, by O. B. Solokov, V. E. Naish.  
RUSSIAN, per, Fizika Metallov i Metallovedenie, Vol 23, No 5, 1967, pp 819-830.  
\*NASA TT F-11,419

Scientific  
Physics (Contd)

Theory of Absorption of Ultrasound by Free Electrons in a Metal in a Quantizing Magnetic Field, by B. N. Filippov, P. S. Zyryanov.  
RUSSIAN, per, Fizika Metallov i Metallovedenie, Vol 23, No 5, 1967, pp 769-785.  
\*NASA TT F-11,417

Indirect Quadrupole-Quadrupole-Interaction Between Nuclei in Metals, by A. R. Kessle.  
RUSSIAN, per, Fizika Metallov i Metallovedenie, Vol 23, No 5, 1967, pp 837-844.  
\*NASA TT F-11,420

Interaction of the Glow Front with a Transverse Magnetic Field in an Electrodynamical Shock Tube, by G. I. Goryaga, A. I. Kokorev, 9 pp.  
RUSSIAN, per, Herald of the Moscow State University, No 4, Jul-Aug 1966, pp 3-8.  
Dept of Navy ONI tr 2482

The Numerical Solution of Some Problems in the Flow of a Viscous Fluid, by L. M. Simmi.  
RUSSIAN, per, Inzh. Zhur., Vol 4, No 3, 1964, pp 446-450.  
NLL RTS 3634

Stability of the Laminar Flow of a Liquid Film, by Yu. A. Buevich and Tu. P. Gupalo, 18 pp.  
RUSSIAN, per, Izv. Akad. Nauk SSSR, Mekh, Zhidk, Gaza, Vol 1, 1966, pp 105-112. P911355867  
AEC SC-T 67-0948

Newton's Law of Resistance for Bodies Formed by Intersecting Surfaces, by A. L. Gonor, 19 pp.  
RUSSIAN, per, Izv. Akad. Nauk SSSR, Mekh Zhidk. Gaza, No 1, 1967, pp 93-101. P911353967  
AEC SC-T-67-0946

The Circulation of a Turbulent Wall Jet Along a Solid Wall, by L. S. Abramson and Yu. A. Skovrodnikov.  
RUSSIAN, per, Izvest. Akad. Nauk SSSR Otd. Tekh. Nauk, Mekh. i Mash., No 3, 1962, pp 176-177.  
NLL RTS 3723

Registration of Low-Energy Protons Abroad Aes of the Series "Elektron", by E. W. Sosnovets.  
RUSSIAN, per, Izvestiya AN SSSR Seriya Fizicheskaya, Vol 30, No 11, 1966, pp 1820-1823.  
Sci-Tech Info Facility P910383667  
ST-PF-10657

Scientific  
Physics (Contd)

On Various Methods of Calculating the Reservoir Temperature Field Under Heat Injection, by N. A. Avdenin.  
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedenii Neft i Gaz, No 8, 1964, pp 39-46.  
NLL RTS 2962

Unpredicted Industrial Uses of "Magnetized" Water, 7 pp.  
RUSSIAN, per, Nauchno-tekhnicheskiye Obshchestva SSSR, No 8, Aug 1967, pp 31-34.  
JPRS 43127

Nonlinear Problems of Stress Concentrations Near Holes in Plates, by G. N. Savin  
RUSSIAN, per, Teoriya Oboloch. i Plastin. Erevan. Akad. Nauk Arm. SSR, 1964, pp 116-140.  
NLL RTS 3551

Radiative Heat Exchange in Dusty Gaseous Media, by A. M. Gurvich, A. G. Elokhi.  
RUSSIAN, per, Teplotekhnika, No 2, 1955, pp 3-10.  
NLL RTS 3272

Heat Transfer of Banks of Pipes in a Transverse Stream of a Free Flowing Solid (Sand), by S. V. Donakov.  
RUSSIAN, per, Teplotekhnika, No 11, 1958, pp 76-80.  
NLL RTS 3546

The Dissipative Heating of an Incompressible Viscous Fluid in Laminar Flow in a Round Cylindrical Pipe, by L. I. Kudras' v and V. M. Golovin.  
RUSSIAN, per, Trudy Khibyev. Aviats. Instituta, Vol 15, No 1, 1962, pp 27-36.  
NLL RTS 3273

The Aerodynamics and Heat Transfer of Circular, Turbulent Air Jets Flowing in an Orifice on a Plate Perpendicular to the Direction of Flow, by A. L. Kuznetsov.  
RUSSIAN, per, Trudy Leningradskogo Korablistroitel'nogo Instituta, Vol 44, 1964, pp 57-65.  
NLL RTS 3653

Investigation of Heat Transfer During Boiling in Vertical Pipes.  
RUSSIAN, per, Trudy Moskovskogo Energet. Instituta, No 48, 1963, pp 53-66.  
NLL RTS 3290

Scientific  
Physics (Contd)

Homogeneous Spaces of the General Theory of Relativity, by G. I. Kruchkovich.  
RUSSIAN, per, Trudy Seminara po Vektornomu i Tensor. Analizu, Vol 12, 1963, pp 71-95.  
NLL RTS 3549

Neutron and Optical Spectra as Sources of Information About the Motion of Molecules in a Fluid, by L. I. Komarov and I. Z. Fischer.  
RUSSIAN, per, Ukr. fiz. Zhur., Vol 9, No 4, 1964, pp 349-354.  
NLL RTS 3518

The Structure of a Short-Range Order in Fusions of Semiconductors, by A. R. Regel' and V. M. Glazov, 5 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 75-79.  
JPRS 43071

X-Ray Diffraction Determination of Type II Stresses and Block Sizes in Thin Permalloy Films, by V. P. Skvorchuk and G. V. Khar'kova.  
RUSSIAN, per, Vopr. Fiz. Metal. i Metallov. Inst. Metallofiz. AN Ukr. SSR, No 18, 1964, pp 187-188.  
NLL 9022.4 (66/354)

The Non-Equilibrium Distribution of Energy According to Vibrational Degrees of Freedom of the Molecules During Disturbance of the Maxwell Distribution, by A. I. Osipov and Ye. V. Stupochenko.  
RUSSIAN, per, Zhur. Priklad. Mekhan. i Tekh. Fiziki, Vol 3, 1963, pp 41-44.  
NLL RTS 3649

Interrelation and Peculiarities of Processes of Stress Relaxation, Creep and Uniaxial Elongation, by G. S. Vorotnikov and B. M. Revinskiy, 14 pp.  
RUSSIAN, per, Zh. Prikl. Mekh. Tekh. Fiz., No 6, 1966, pp 19-26.  
P911355467  
AEC WAPD-Trans-71

Twin Propagation in Highly Work-Hardened Metals by G. Fontaine, 18 pp  
FRENCH, per, Phys. Status Solidi, Vol 17, 1966, pp 603-615.  
P911356067  
AEC ORNL-Tr-1758

On the Correlation of Wave Functions and Eigenvalues to the Individual Electrons of an atom, by T. Koopmans.  
GERMAN, per, Physica, Vol 1, 1934, pp 104-113.  
\*Dept of Navy/NRL

Scientific  
Physics (Contd)

Current Problems of Kinematics and Dynamics of a Rigid Body, by Giuseppe Grioli, 25 pp.  
ITALIAN, rpt, Rend. Seminar. Mat. Fis. Padua, Vol 34, 1964, pp 3431-3450. P911354067  
ABC SC T-67-0922

The Stability of Processes of Deformation of Continuous Bodies, by A. A. Movchan.  
POLISH, per, Archiwum Mechaniki Stosowancj, Vol 5, 1963, p 15.  
NLL RTS 3592

Space Technology

The Soviet "Meteor" Space System, by I. Vetlov, 9 pp.  
RUSSIAN, per, Aviatsiya i kosmonavtika, No 9, 1967, pp 31-35.  
JPRS 43275

Recent Developments in Satellite Observation Techniques, by P. Muller, 5 pp.  
FRENCH, per, Information Bulletin No. 30, Feb. 1966, pp 15-20 P944347267  
TIL 1178

Miscellaneous

Problems of the Czechoslovak Scientific Base, by Dr. Jaromir Pospisil, 6 pp.  
CZECH, per, Nova Mysl, No 17, 22 Aug 1967, pp 30-32.  
JPRS 43003

Decoration of Workers of Science with Orders and Medals of the USSR, 24 pp.  
RUSSIAN, per, Vestnik Akademii Nauk SSSR, Vol 37, No 7, July 1967, pp 82-97.  
JPRS 43071

Specialized Direction of Scientific Research, by Andras Hegedus, 10 pp.  
HUNGARIAN, per, Magyar Tudomány, Vol 74, No 7-8, 1967, pp 504-511.  
JPRS 43216

Scientific  
Miscellaneous (Contd)

Proceedings of the Corporate Organs of the Academy of Sciences, 8 pp.  
HUNGARIAN, per, Magyar Tudomány, Vol 74, No 7-8, Jul-Aug 1967, pp 519-522.  
JPRS 43194

Scientific Conference on Statistics at the Academy, by Mrs. Aladar Mod, 7 pp.  
HUNGARIAN, per, Magyar Tudomány, Vol 74, No 7-8, Jul-Aug 1967, pp 523-526.  
JPRS 43194

INFORMATION RECEIVED DURING DECEMBER

ON COVER-TO-COVER TRANSLATIONS

Doklady Akademii Nauk SSSR, Vol 173, No. 1-6,  
Mar-Apr 1967.  
CB

Elektrokhimiya, Vol 3, No. 5, May 1967.  
CB

Elektrosvyaz, Vol 21, No 4, 1967.  
IEEE

Endokrynologia Polska, Vol 17, No. 5-6, 1966.  
CFSTI TT 66-57008/5-6

Geodeziya i Kartografiya, No. 6, 1966.  
American Geophysical Union

Geologiya Nefti i Gaza, Vol 7, No. 3, 1963.  
Petroleum Geology

Hung-ch'i, No 14, Sept 17, 1967.  
JPRS 42,996

Hung-ch'i, No. 15, Oct 6, 1967  
JPRS 43,272

Izmeritel'naya Tekhnika, No. 4, April 1967.  
CB

Izmeritel'naya Tekhnika, No. 5, May 1967.  
CB

Izvestiya Akademii Nauk SSSR, No. 1-6, 1966.  
Scientific Information Consultants Limited

Izvestiya Akademii Nauk SSSR, No. 6, 1966.  
Scientific Information Consultants Limited

Kibernetika, Vol 2, No. 2, Mar-Apr 1966.  
The Faraday Press, Inc.

Kristallografiya, Vol 12, No. 3, Nov-Dec 1967.  
American Institute of Physics

Kulloja, No. 7, 1967.  
JPRS 43,222

Optika i Spektroskopiya, Vol 23, No. 1, July 1967.  
Optical Society of America

Polskie Archiwum Medycyny Wewnetrznej, Vol 37, No.  
4, 1966.  
CFSTI TT 67-56008/4

Radiotekhnika, Vol 22, No. 4, 1967.  
Inst. of E. E. E.

Radiotekhnika i Elektronika, Vol 12, No. 5, May 1967.  
Institute of Electrical and Electronics Engineers

Savremena Poljoprivreda, Vol 14, No. 1, 1966.  
CFSTI TT 67-58007/1

Staub Reinhaltung der Luft, Vol 27, No. 1, Jan 1967.  
CFSTI TT 67-51408/1

Tekhnika i Vooruzheniye, No. 6, 1967.  
ACSI J-3101

Tekhnika i Vooruzheniye, No. 9, 1967.  
ACSI J-3702

Tyl i Snabzheniye, No. 9, 1967.  
ACSI J-3646

Vestnik Probenjennaja Geofizika, Series C, No. 6, 1965.  
CFSTI TT 65-50403/3

Vestnik Protivovozdushnoy Oborony, No. 7, 1967.  
ACSI J-3145

Vestnik Protevovozdushnoy Oborony, No. 9, 1967.  
ACSI J-3647

Voyenno Meditsinskiy Zhurnal, No. 9, 1967.  
ACSI J-3648

Voennyy Vestnik, No. 7, July 1967, pp 3-125.  
ACSI J-3088

Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki,  
Vol 25, No. 5, Nov 1967.  
American Institute of Physics

Zhurnal Prikladnoi Khimii, Vol 40, No. 1, Jan 1967.  
CB

# DOKLADY PHYSICAL CHEMISTRY

A translation of the Physical Chemistry Section of *Doklady Akademii Nauk SSSR*

Volume 173, Number 1-6

March-April, 1967

## CONTENTS

	Engl./Russ.
Effect of Impurities on the Initial Stages of the Thermolysis and Photolysis of Silver Oxalate -V. V. Boldyrev, V. I. Eroshkin, I. A. Ryzhak, and L. M. Kefell . . . . .	173 117
Infrared Absorption Spectra of Siloxanes-L. M. Volkova and N. A. Chumaevskii . . . . .	176 120
Complexes of Tetranitromethane with Unsaturated Compounds, Studied by Ultraviolet Spectroscopy-V. A. Gorodyskii and V. V. Perekalin . . . . .	179 123
Magnetic Susceptibility of New Inner-Complex Vanadyl Compounds-I. Ya. Kasparova and V. V. Zelentsov . . . . .	182 127
Quenching of the Luminescence of Mixed Excimers by Unexcited Molecules of One of the Compounds Contained in Them-I. E. Obyknovennaya and A. S. Cherkasov . . . . .	185 129
Condensation of Toluene and Methanol on Synthetic Zeolites with Ion-Exchange Cations of the Alkali Metals-Yu. N. Sidorenko, P. N. Galich, V. S. Gutyray, V. G. Il'in, and I. E. Nelmark . . . . .	188 132
Optical Spectra and Structure of Certain Organophosphorus Compounds Containing the Diene Group-R. R. Soagidullin, A. V. Chernova, É. A. Ishmaeva, and A. N. Pudovik . . . . .	191 135
X-ray Study of Microstresses in Finely Dispersed Porous Solids-E. D. Shchukin, S. I. Kontorovich, Zh. G. Malikova, L. M. Rybakova, B. M. Rovinskii, and P. A. Rebinder . . . . .	195 139
Nuclear Quadrupole Resonance of $\text{Cl}^{35}$ in Organylchlorogermaniums-I. P. Biryulov, M. G. Voronkov, V. F. Mironov, and I. A. Safin . . . . .	199 381
Enthalpy of Formation of the Iodide Ion in Aqueous Solution-A. F. Vorob'ev, A. F. Broler, and S. M. Skuratov . . . . .	203 385
Effect of Radiation on the Selectivity of Yttrium Oxide in Decomposing Isopropyl Alcohol -V. I. Spitsyn, G. N. Pirogova, R. I. Korosteleva, and M. P. Glasunov . . . . .	206 388
Electrochemical Preparation of Stereoregular Polymers-G. S. Shapoval, E. M. Skobets, and N. P. Markova . . . . .	209 392
Mossbauer Spectra of Dithiocyanatotetrapyrroline Iron -A. V. Ablov, V. L. Gol'danskii, E. F. Makarov, and R. A. Stukan . . . . .	212 595
Value of the $\text{SiOSi}$ Angles in Carbocyclosiloxanes-L. M. Volkova and N. A. Chumaevskii . . . . .	214 598
One New Relationship between the Kinetic Characteristics of Thermal Decomposition and Electrical Conductivity of Cobalt and Nickel Formates-B. V. Erofeev, M. V. Malorova, and L. Ya. Mostovaya . . . . .	218 602
Ketonization of Carboxylic Acid on Samarium Oxide in Stationary and Nonstationary Systems -I. L. Parbusina, I. E. Sozina, T. N. Ivanova, and A. A. Balandin . . . . .	221 606
Chemical After-Effects in the Production of Neptunium 239 by the Neutron Irradiation of Uranyl Salts-V. F. Perebrukhin, N. N. Krot, M. P. Glasunov, and A. D. Gel'man . . . . .	224 609
Mechanism of the Photolysis of Frozen Solutions of the Oxalate Complex of Co (III) According to EPR Data-A. L. Poznyak and G. A. Shaginvalanova . . . . .	227 612
Investigation of the Adsorption of Trimethylcarbinol on Montmorillonite by the Method of Infrared Spectroscopy-Yu. I. Tarasovich, N. M. Radul, and F. D. Ovcharenko . . . . .	230 615

(Contd)

Available from Consultants Bureau

# CONTENTS

(continued)

Doklady Akademii Nauk SSSR  
Vol 173, No. 1-6, Mar-Apr 1967.

Engl./Russ.

EPR Spectra of Ion Radicals Formed in the Electrochemical Reduction of Some gem-Dinitroalkanes and Their Salts—B. I. Shapiro, V. M. Kazakova, Ya. K. Syrkin, Ya. K. Syrkin, and L. V. Okhlobystina .....	233	618
Possible Nature of Certain Absorption Bands in the Infrared Spectra of Catalysts and Adsorbed Molecules—V. I. Yakerson, L. I. Lafer, and A. M. Rubinshtein .....	237	622
Interactions in Intermolecular Bromine and Hydrogen Bromide at 80°K—E. I. Yakovenko, G. B. Serteev, and G. P. Kalinina .....	240	626
Theory of the Isomorphic Phase Transformation and Critical Transition of Cerium —I. L. Aptekar' and E. G. Ponyatovskii .....	244	851
Vibrational Spectra of Heteroorganic Compounds with Elements of Group VB—A. E. Borisov, N. V. Novikova, N. A. Chumaevskii, and E. B. Shkirtel' .....	248	855
Influence of Hydrogen Bonds on the Reactivity of Radicals—G. E. Zaikov, Z. K. Maizus, and N. M. Émanuéi' .....	252	859
Mechanism of Ethylene Oxidation by Palladium Salts in Acetic Acid—I. I. Moiseev, A. P. Belov V. A. Igoshin, and Ya. K. Syrkin .....	256	863
Mixed Excimers of Dimeso-Substituted Anthracenes with Acridine—I. E. Obyknoennaya and A. S. Cherkasov .....	260	867
Formation of Specific Silica Gels in Vapors of the Monomers—F. A. Yampol'skaya, Yu. N. Polishchuk, and M. N. Polyakov .....	263	870
Thermodynamics of Polymerization—L. A. Dudina, V. I. Irzhak, and N. S. Enikolopyan .....	266	1121
Mechanism of Asymmetric Hydrogenation—B. I. Klabunovskii and Yu. I. Petrov .....	269	1125
Electrophilic Character (Lewis Acidity) of Electronically Excited States of Aromatic Hydrocarbons—M. G. Kuz'min, Yu. A. Mikheev, and L. N. Guseva .....	272	1129
Surface Activity of a Biologically Active Semicolloid—Sodium Cholate—Z. N. Markina, N. N. Tsirkurina, O. P. Bovkun, A. D. Kopeina, and P. A. Rebinder .....	275	1132
Electron Paramagnetic Resonance and Magnetic Susceptibility of Compounds of Cu(II) with Dicarboxylic Acids—Yu. V. Yablokov, V. V. Zelentsov, L. N. Romanenko, and V. M. Allenov .....	279	1136
Influence of the Specific Radioactivity of the Isotope Sb <sup>124</sup> on the Electrodeposition of Antimony —V. S. Arakelyan, Vikt. I. Spitsyn, and L. A. Uvarov .....	282	1367
Correspondence of the Laws of the Delocalization of the Spin Density from Data on the EPR of Radicals and the NMR of Molecules and Complexes of Paramagnetic Ions—E. E. Zaev, Yu. N. Molin, G. M. Zhidomirov, and V. V. Voevodskii .....	285	1370
Correlation between Proton Spin-Lattice Relaxation and Intramolecular Vibrations in Liquid C <sub>2</sub> -C <sub>6</sub> Normal Alcohols—S. -Kh. G. Kashaev and N. K. Gaisin .....	289	1374
Configurational Correlations in Asymmetric Catalysis—E. I. Klabunovskii .....	292	1378
Combustion of Substances with a Solid-Reaction Layer—B. I. Khaikin and A. G. Merzhanov ...	295	1382
Nature of the Solid Solutions in the BaSO <sub>4</sub> -KMnO <sub>4</sub> System—N. A. Shishakov and L. P. Dmitrieva	299	1388
ERRATA .....	301	—

The Russian press dates (podpisano k pechati) of the first and last issues covered in this issue of the translation were, respectively, 2/23/1967 and 4/20/1967. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available from Consultants Bureau



# SOVIET ELECTROCHEMISTRY

A translation of *Élektrokhimiya*

Volume 3, Number 5

May, 1967

## CONTENTS

Engl./Russ.

General Regularities Governing Differential Capacitance Curves Given Linear Dependence of the Attraction Constant on the Electrode Potential—B. B. Damaskin and S. S. Dyatkina . . .	465	531
Properties of the Nickel Oxide Electrode. I. Electrochemical Behavior of the Higher Oxides of Nickel—N. Yu. Uflyand, A. M. Novakovskii, and S. A. Rozentsveig . . . . .	470	537
Influence of an Indifferent Electrolyte on the Rate of Reduction of Anions—E. V. Yakovleva and N. V. Nikolaeva-Fedorovich . . . . .	476	543
Conditions of the Electrodeposition of Titanium Film in a Chloride Melt. I. Diffusion Limitations in a Chloride Melt as a Factor Retarding the Electro-Deposition of Titanium Film—V. P. Elyutin, B. S. Lysov, and Yu. Ya. Andreev . . . . .	487	549
Cathodic Solution of Tellurium in Alkali Solutions—V. M. Komandenko and A. L. Rotinyan . . .	484	552
Determination of the Transport Number of the Lithium Ion in a Mixed Aqueous Solution of Lithium and Copper Chlorides—E. A. Kaimakov and N. L. Varshavskaya . . . . .	489	558
Mechanism of the Electroreduction of Nitriles of Benzoic, Cinnamic, and Vinylacrylic Acids—I. G. Sevast'yanova and A. P. Tomilov . . . . .	494	563
Electric Conductivity of Melts of Certain Binary Halide Systems—P. I. Protsenko and K. P. Shatskaya . . . . .	502	571
Specific Influence of Certain Alcohols as Solvents upon the Potential of the Glass Electrode—M. M. Shults and I. S. Ivanovskaya . . . . .	506	576
Simulation of the Structure of the Double Electric Layer on Gallium and Some of the Adsorption Properties of Mercury in the Presence of Thiourea—A. M. Morozov, N. B. Grigor'ev, and I. A. Bagotskaya . . . . .	514	585
Absorption of Hydrogen on Platinum of Different Degrees of Dispersion—R. V. Marvet and G. A. Petril . . . . .	519	591
Double Nature of the Structure of Anode Iodine Films—A. Ya. Gokhshtein . . . . .	527	600
Electrochemical Method of Determining the Ohmic Resistance and Thickness of Electrolyte Films on Metal—Yu. A. Mazitov . . . . .	533	605
<b>BRIEF COMMUNICATIONS</b>		
Polarography of Conjugated Systems in Dimethylformamide. IV. Hydrocarbons and Certain Monofunctional Derivatives: Influence of Structure—V. G. Mairanovskii, I. E. Valashek, and G. I. Samokhvalov . . . . .	538	611
Experimental Verification of Thermodynamic Theory of the Hydrogen Electrode on Calcium—D. A. Petril, A. M. Kossaya-Tsybulevskaya, and Yu. M. Tyurin . . . . .	545	617
Study of the Electrochemical Processes in the Powdered Iron Electrodes by Potentiostatic and Potentiodynamic Methods—V. N. Fierov and L. I. Pavlova . . . . .	549	621
Mechanism of Anodic Solution of Copper in Phosphoric Acid. III. Pulsed Measurements—A. Sh. Valeev and G. I. Petrov . . . . .	553	624

(Contd)

Available from Consultants Bureau

	Engl./Russ.
Bromine Galvanic Elements—A. E. Gorenbein and E. Ya. Gorenbein .....	556 628
Cell for Microcoulometry with a Mercury Drop Electrode and Circulation of the Solution —V. A. Kolpakov and Ya. I. Tur'yan .....	558 629
Investigation of Electrode Semiconductor Catalysts. VII. Investigation of the Structure and Semiconductor Properties of Solid Solutions in the System of Oxides MnO—NiO —O. K. Davryan, L. A. Kalinets, V. Ya. Shvartsman, and Yu. A. Tkach .....	559 631
Function Analysis of Porous Electrodes Using a Computer II. Liquid Porous Electrodes with Forced Reagent Supply from the Rear—N. V. Korovin and A. S. Chudinov .....	563 635
Mechanism of Operation of Gas Electrodes on a Plastic (Hydrophobic) Base II. Behavior of the Electrode in a Channelled Space—N. V. Osetrova and V. S. Bagotskii .....	566 638
Electrodes of Cathode-Exchange Membranes at Elevated Temperatures—A. V. Gordievskii, E. L. Filippov, and V. S. Shterman .....	569 642
Diffusion Regime of Current Generation on Semi-Immersed Electrodes with Allowance for Reagent Transport Through the Solid Phase—Yu. A. Chizmadzhev, Yu. G. Chirkov, and L. P. Klevtsov .....	572 645
The Adsorption of Hydrogen on Platinum-Plated Platinum in the Presence of Chemisorbed Saturated Alcohols and Aldehydes—B. I. Podlovchenko and V. F. Stenin .....	576 649
Effect of Surface-Active Materials of the Cathode Type on the Electrodeposition of Rhenium —R. S. Nikitin and O. A. Suvorov .....	581 653
Determination of the Zero-Charge Potential of Rhodium in Acid Solution by Means of Radioactive Tracers—N. A. Balashova, A. M. Kossay, and N. T. Gorokhova .....	583 656

The Russian press date (podpisano k pechatii) of this issue was 4/19167.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

# TELECOMMUNICATIONS and RADIO ENGINEERING

1967

NUMBER 4

Elektrosvyaz'  
Vol 21, No. 4, 1967

Page

Ya. I. Velikin, E. V. Zelyakh and A. I. Ivanova: Low-Pass Magnetostrictive Filters . . . . .	1
V. M. Kantor and A. A. Lanne: The Synthesis of Low- and High-Pass Piezoelectric Filters from Their Effective Parameters . . . . .	6
V. M. Rozov: Some Trends in Short-Wave Communications . . . . .	15
L. G. Sodin and I. L. Verbitskiy: Directivity of an Antenna with a Chebyshev Pattern . .	20
B. S. Livshits and G. B. Khanin: Urban Cross-Bar Stations and Substations . . . . .	24
O. F. Dmitriyev and G. A. Yemel'yanov: Statistical Study of Telegraph Channel Performance Factors . . . . .	30
A. V. Mikhailov: Data Transmission Reliability Improvement by Transient Compensation in Channels with Phase Distortion . . . . .	33
B. P. Borisov: A Method for the Analytic Representation of the Nonlinear Characteristic of a Long-Distance Group Repeater Output Transformer . . . . .	40
Yu. N. Yablin: An Antinoise Transformer for Video Signal Transmission Over Coaxial Cables . . . . .	47
N. S. Kreingel': RC Filters with a Fast Rate of Droop . . . . .	53
BRIEF COMMUNICATIONS	
N. V. Zakharchenko and I. A. Leshchuk: Checking the Effect of the Transmitter Contactor System on Telegraphic Distortion Distribution . . . . .	57
L. M. Blyumberg: Linear Amplifier Noise and Optimization of Signal Source Impedance . . . . .	60
In Our Forthcoming Issues . . . . .	64
New Books . . . . .	65

RADIOTEKHNIKA  
Vol 22, No. 4, 1967

V. V. Malanov: Single-Polarity Pulse-Width Modulation of the Third Kind . . . . .	67
I. I. Petrov: Comparative Assessment of Communication Systems With Different Types of Modulation . . . . .	71
Yu. B. Okunev and L. M. Rakhovich: The Rectangular Waveforms Used as the Weighting Function of an Optimum Receiver . . . . .	78
L. Ye. Klyagin: Linearization of the Phase Characteristics of Wide-Band Phase Shifters . . . . .	82
E. G. Vlostovskiy: Theory of Coupled Transmission Lines . . . . .	87
S. P. Belousov and V. V. Lyalikov: Short-Wave Logarithmic Antenna . . . . .	94
I. G. Mironenko: Synthesis of a Finite-Aperture Antenna Maximizing the Fraction of Power Radiated in a Prescribed Solid Angle . . . . .	99
M. F. Ponomarev and V. P. Popov: Selective Semiconductor (Integrated) RC-Circuit . .	104
I. V. Vasil'kevich: General Analysis of a Single-Stage Amplifier with Combined Feedback, Operating into a Complex Load . . . . .	110
A. N. Morgunov: Transistor Tuned Cascode Amplifier . . . . .	118
S. A. Yatskayer: Carrier-Frequency Discrimination of RF Pulse Sequences . . . . .	122
B. V. Perlov and Ye. Kh. Karayevov: Design Formulas for Transistor Trigger Circuits with Neon Tubes . . . . .	126

(Contd)

Available from I. E. E. E.

	Page
B. D. Samoylovsky: Determination of the Angular Coordinates of a Combination of Radiators .....	131
E. L. Kantor: A Measuring Voltage Generator with Adjustable Wave Shape and Variable Time Scale and Some of Its Applications .....	136
V. A. Melezhik: The Action of Noise on a Filter-Discriminator-Integrator System ...	142
Letter to the Editor .....	147
<b>BRIEF COMMUNICATIONS</b>	
R. I. Kubshinov: Probability Distribution of Impulse Interference at the Output of a Bandpass Filter .....	148
L. K. Soloshek: Instability in Converters Using a Nonlinear Capacitance .....	149
N. N. Fomin: Design of a Tunnel Diode Oscillator with a Quartz Crystal in the Capacitive Arm of the Tuned Circuit .....	151
V. N. Vettlinsky: The Choice of Optimum Gain in the Feedback Circuit of a Synchronous Store .....	154
New Books .....	156

#### EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh <sup>-1</sup> )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
aresin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

Available from I. E. E. E.

CONTENTS

J. Kosowicz, A. Podlipniak-Karlikowska, A. Graczykowska-Koczorowska: Pneumopelvigraphy in clinical endocrinology . . . . .	261
K. Motlik: An estrogen-producing "yellow tumor" of the ovary associated with arterial hypertension (A case report contributing to the problem of classification of functioning ovarian neoplasms) . . . . .	*
L. Dryzek-Mikolajczyk: Ascorbic acid content in rat ovaries and adrenal glands . . . . .	271
J. Jonek, Z. Zieliński: Localization of gamma-glutamyl-transpeptidase in the ovaries of various laboratory animals . . . . .	279
B. H. Liwnicz, K. Włodarski: Autoradiographic studies on the effect of estrogen on <sup>35</sup> S-sulphate metabolism in the pubic symphysis of white mice . . . . .	291
K. Grottel, M. Michalkiewicz: The effect of stimulation of the major splanchnic nerve on the secretion of free 11-hydroxycorticoids in an acute experiment in the dog . . . . .	302
K. Grottel: The effect of electrical stimulation of the dorsal vagus branches to the celiac plexus on the secretion of 11-hydroxycorticoids in an acute experiment in the dog . . . . .	312
J. Tatoń, B. Lao: Progress of investigations on the pathophysiology of human growth hormone . . . . .	*
K. Kuczevska, S. Seniow: A case of renal glucosuria in a patient with family anamnesis of diabetes mellitus . . . . .	*
E. Radwańska, W. Śliwiński, R. Stupnicki: Plasma progesterone level and the response of the pregnant uterus to oxytocin . . . . .	319
Z. Cymerys: Alkaline phosphatase and PAS-positive material in the vaginal mucosa during menstrual cycle and pregnancy . . . . .	325
M. Krotkiewski, L. Korniszewski: Thyroid and adrenocortical relationships . . . . .	*
J. Grabski, N. Szymik, W. Grzywna: Histometric evaluation of the seminal vesicles, prostate and the levator ani muscle in castrated rats . . . . .	337
J. Tynecki, H. Zrubek, M. Zych: Comparative studies of alkaline phosphatase and estrogen excretion in cases of spontaneous abortion and in normal pregnancy . . . . .	344
J. Baron, F. Krzywińska, M. Michalkiewicz: Complex studies of steroid hormones in women with hirsutism . . . . .	354
J. Baron, M. Michalkiewicz: Plasma fluorescent 11-hydroxycorticoids in women with endocrine disturbances . . . . .	362
D. Kruze, P. Kubikowski, P. Wierzchowski, J. Wysokowski: The effect of anabolic steroids (Dianabol, Steranabol and Deca-Durabolin) on nitrogen metabolism in the rabbit . . . . .	368
W. Dołata, F. Bielicki: The levels of the liver glycogen in experimentally induced hyperthyroidism in rabbits . . . . .	*
W. Napiórkowska: The function of the adrenal cortex in hyperthyroidism . . . . .	*

\* Papers denoted by asterisks may be found in the Endokrynologia Polska 5/66 and 6/66.

Polish Endocrinology - 16

(Contd.)

Available from CFSTI TT 66-57008/5-6

ENDOKRYNOLOGIA POLSKA  
Vol 17, No. 5-6, 1966

S. Liebhart, B. Trębicka-Kwiatkowska: Clinical evaluation of Lyndiol in contraception and therapy . . . . .	378
A. Mazurowa, S. Witoszyński, S. Adamiak: Studies of pituitary functional reserve in diabetes mellitus . . . . .	389
A. Micznikowski, D. Zawadzka, M. Stepniewski: The influence of surgical trauma on urinary gonadotrophin levels . . . . .	.
H. Doktorczyk, A. Gałzka, R. Marciniak: Pseudo-hypo-parathyroidism in an adult . . . . .	.
K. Boczkowski, J. Teter, J. Potocki: Pure gonadal dysgenesis with normal male karyotype 46/XY . . . . .	396
A. Kasperlik-Zaluska, B. Migdalska: The effect of betametasone on the pituitary-adrenal system . . . . .	402
M. Krotkiewski, L. Korniszewski: Obesity — Metabolic or regulatory disturbance. A review . . . . .	.

Available from CFSTI TT 66-57008/5-6

**ГЕОДЕЗИЯ И ФОТОГРАФИЯ**  
**№ 6, 1966**

	English Page	Russian Page
Z. M. Yurshanskiy: Formulas for Evaluating the Accuracy of a Set of Functions in the Least Squares Method .....	315	3
S. E. Mining: Measure of Measurement Errors Based on Adjustment Results with Allowance for Errors in Initial Data .....	320	19
Yu. M. Neyman: An Algorithm for Planning a Geodetic Net on an Electronic Computer .....	325	33
S. I. Zapasskiy: Rigorous Adjustment of Angles with Measured Directions .....	329	46
V. I. Akulov: Unique Formula for the Mean Square Error in the Position of the Last Point in a Polygonometric Traverse .....	331	51
N. A. Budenkov: Connection to Triangulation Stations by the Lateral Intersection Method .....	334	59
V. V. Bakanova: Accuracy of Drawing Relief on a Topographic Stereometer in Compiling 1:2000 Maps .....	336	65
B. A. Litvinov and M. M. Mashimov: Analysis of Results of Investigation of Horizontal and Vertical Circles by the Inverse Matrix Method .....	338	72
S. F. Fedorov: Investigation of the Relationships between Elements of a Circular Trilateration Net .....	340	76
I. A. Zaytsev: Accuracy of Survey Control Executed by Laying Out Chains of Elongated Triangles .....	342	83
L. V. Ogorodova: Accuracy of Computing Gravity Anomalies above the Earth .....	345	91
V. G. Chernyavskiy: Computing the Initial Sides of Analytical Nets .....	350	106
B. N. Zhukov: Determination of Displacements of Control Points of an Alignment by Measuring Small Angles .....	353	115
K. A. Zykov: One Error in Evaluating the Accuracy of Determinations Made by Electronic (Time) Difference Range Finders .....	359	132
V. Yu. Min'ko: Adjustment of a Net of Spatial Phototriangulation Consisting of Several Flight Strips .....	361	139
Sao Ts'eng: Vibration Tests for a Small Aerial Camera .....	367	157
M. A. Topchilov: Construction of Hyperbolic Grids in a System of Geographical Coordinates .....	371	167
V. S. Usov: Image Construction in a System of Two Mirrors by Converging Beams of Rays .....	376	182
Alphabetical Index by Author .....	378	—
Alphabetical Index by Subject .....	382	—

English edition published, October 1967

Available from American Institute of Physics

**TABLE OF CONTENTS**  
**Vol. 7, No. 3, 1963**

1. Main results of oil and gas exploration in the USSR during 1962.  
V. G. Vasil'yev et al. . . . . p. 115
2. Some problems of the geology and oil-gas prospects of the southwest part of the Peri-Caspian depression.  
V. I. Mal'tsev et al. . . . . p. 122
3. Exploration for oil and gas pools related to traps of the lithologic and stratigraphic type.  
N. V. Beznosov et al. . . . . p. 127
4. Features of the distribution of oil and gas in salt-dome areas.  
L. V. Kalamkarov et al. . . . . p. 134
5. New buried anticlinal zone in the Kuban.  
V. I. Korneyev . . . . . p. 142
6. Tectonics and oil productivity of South Mangyshlak.  
A. I. Dimakov et al. . . . . p. 146
7. New data on the tectonics of the northwest part of the Apsheron oil region.  
G. G. Tumikyan and E. M. Shekinskiy . . . . . p. 150
8. Determination of the time of formation of gas pools.  
G. A. Aleksin et al. . . . . p. 153
9. Role of organic matter in the natural history of oil in the light of the ideas of Academician V. I. Vernadskiy.  
N. B. Vassoyevich . . . . . p. 158
10. Distribution of chlorine, bicarbonates, and sulfates in the Lower Cretaceous of Dagestan.  
V. D. Patrusheva . . . . . p. 163
11. Seismic investigations in the northwest of the Shirvan Steppe of Azerbaydzhan.  
V. A. Levi and B. D. Trebukova . . . . . p. 167

- \* - \* - \* -

**PETROLEUM GEOLOGY**  
**P. O. Box 171**  
**McLean, Virginia**  
**22101**

**Translator and Publisher**  
**Dr. James W. Clarke**

**Technical Editor**  
**Grace Carrington**

**Editorial Assistant**  
**Antoinette B. Clarke**

**Published monthly**  
**\$25.00/yr. (12 issues)**

**Published on a non-profit basis in the interest of geological science**

**Available from Petroleum Geology**



TRANSLATIONS FROM HUNG-CH'I (RED FLAG)

No. 14, 1967

- Communist China -

No. 68

This serial publication contains translations of all of the articles from the Chinese-language periodical, Hung-ch'i (Red Flag), Peking, No. 14, 17 Sep 1967. Complete bibliographic information accompanies each article.

CONTENTS

	<u>Page</u>
Comments on Tao Chu's Two Books . . . . .	1
Bring About the Revolutionary Great Alliance in the Course of the High Tide of Revolutionary Mass Criticism and Repudiation . . . . .	25
Steadfastly Stand Behind the Proletarian Revolutionaries . . . . .	29
The Great Chinese People's Liberation Army Is a Reliable Pillar of the Dictatorship of the Proletariat and for the Great Proletarian Cultural Revolution . . . . .	36
Further Implement Chairman Mao's Great Principle for Grasping the Revolution and Stimulating Production . . . . .	39
Resolutely Trust and Rely Upon the Great Majority of Cadres . . . . .	43

Available from JPRS 42,996

TRANSLATIONS FROM HUNG-CH'I (RED FLAG)

No. 15, 1967

- Communist China -

No. 69

This serial publication contains the complete translation of articles from the Chinese-language periodical, Hung-ch'i (Red Flag), Peking, No 15, 6 October 1967. Complete bibliographic information accompanies each article.

CONTENTS

	<u>Page</u>
Chairman Mao Inspects North, Central-South and East China.....	1
Comrade Lin Piao's Speech.....	2
Long Live Victory of the Great Cultural Revolution Under the Dictatorship of the Proletariat.....	6
A Great Revolution to Achieve the Complete Ascendancy of Mao Tse-tung's Thought.....	15
"Combat Self-Interest, Criticize and Repudiate Revisionism," Carry Out Well the Struggle-Criticism- Transformation in Various Schools and Unite.....	22
Working Class, Unite.....	26

Available from JPRS 43,272

# MEASUREMENT TECHNIQUES

A translation of *Izmeritel'naya Tekhnika*

Number 4

April, 1967

## CONTENTS

Engl./Russ.

Ion-Formation Energy of Charged Particles in Gases—B. M. Isaev, I. V. Gordeev, Yu. I. Bregadze, Yu. S. Gerasimov, and G. N. Antipenkova .....	389	3
Methods for Designing Adaptive Time-Discretization Devices—T. V. Donetskaya .....	402	13
Automatic Method for Testing the Linearity of Large Surfaces—L. L. Medyantseva, M. Ya. Lyubimtsev, and V. V. Gorbacheva .....	408	18
Installation for Evaluating the Amplitude and Phase-Frequency Characteristics of Vibration-Measuring Equipment by Means of the Interference Method—V. Ya. Barash .....	411	20
Investigation of Vibration-Frequency Transducers—D. D. Dorzhiev, D. V. Ramm, and L. G. Étkin ..	416	24
Possible Method for Measuring Color Temperatures—L. A. Boyarskii .....	420	27
Measurement of the Gain of Transistors by Means of a Large DC Signal—V. S. Golub .....	423	29
Testing the $\beta$ -Factor of Transistors—V. M. Shlyandin and A. G. Ryzhevskii .....	427	32
Analysis of the Precision of a Transistor Pulsed Voltage Divider—E. P. Ugryumov .....	431	35
Wide-Band Frequency Multiplier with a Feedback and a Period Correction—É. K. Shakhov and V. F. Tarasov .....	437	39
Measurements of Resistivity in Semiconductor Materials—L. S. Pavlov and G. S. Kucherenko .....	442	43
<b>ASSISTANCE TO MEASUREMENT LABORATORY WORKERS</b>		
Evaluation of the Density of Solid Bodies—N. A. Smirnova and S. I. Toropin .....	446	46
<b>EXCHANGE OF EXPERIENCE</b>		
Certain Recommendations for a Rational Choice of Measurement Means in Testing the Quality of Production—A. V. Kharitonov .....	450	49
<b>INFORMATION</b>		
E. T. Chernyshev on His 60-th Birthday .....	453	51
Meeting with Readers .....	454	52
In the Committee of Standards, Measures, and Measuring Instruments .....	456	53
Draft of the State Standard on "Measurement Units" .....	458	55
<b>CRITICAL REVIEWS</b>		
Story about a Thermometer .....	479	71
<b>DISCUSSIONS</b>		
Terminology in Vacuum Measurements—M. A. Gulyaev .....	480	71
Terminology of Elastic Elements—E. I. Felikson .....	482	72
<b>BRIEF REPORTS AND LETTERS TO THE EDITOR</b>		
Measuring Instruments with an Expanded Section of the Scale—A. N. Gol'dshrein .....	485	75
Application of a Capacitive Transducer for Recording Changes in Weight on Analytical Balance ADV-200—V. P. Popenko .....	487	76

(Contd)

Available from Consultants Bureau

	Engl./Russ.
Tensomanometer - V. A. Katunin .....	489 77
Dynamometer with a Freely Resting Elastic Element - N. I. Petunin .....	490 78
Assembly of an Indicating and Recording Mechanism in the Same Casing as a Flowmeter - F. P. Sokolov .....	492 79
Errors in the Readings of Measuring Instruments Connected in Parallel to the Same Thermocouple - V. K. Zelenyuk, A. L. Kits, V. Ya. Kotel'man, and A. D. Pinchevskii .....	493 80
Technique for Investigating the Initial Destruction Stage of Contacting Surfaces under Vibration M. S. Ostrovskii and V. M. Andreevskii .....	495 81
Measurement of the Heat-Conduction Coefficient of Liquids - B. M. Kovalenko .....	498 82
Measuring the Hollowness of Ballast Materials by the Hydrocompensation Method - L. N. Terekhin ..	499 83
Evaluation of the Systematic Error in a Photometric Instrument with a Selenium Photocell - Yu. V. Mal'tsev .....	501 84
Measuring the Energy of Short Luminous Pulses - N. N. Borisov and M. G. Rezanova .....	503 85
Device for Testing High-Precision Voltmeters - E. G. Verbenko .....	505 86
Ballistic Equipment with a Semiautomatic Current Switching for Testing Magnetically Soft Ferrite Specimens - A. L. Andrievskii, N. N. Karelin, and Yu. G. Yuskevich .....	507 88
Combined Generator and Digital Frequency Meter with a Pulse-Phase Automatic Trimming - V. V. Kreshchuk .....	509 89
Phase-Difference Angle Indicator - V. A. Khomyak .....	512 91
Obtaining Different Radices on Switching Dekatrons - V. V. Antonov, M. M. Belkova, and E. G. Grigor'ev .....	514 93
Photoelectric Equipment for Obtaining Oscillograms of Vibrating Mechanisms - E. A. Belyaeva-Solov'eva .....	516 94
Selecting the Shape of an Oscillographic Galvanometer Coil - S. N. Gural'nik .....	518 95
ERRATA .....	521

The Russian press date (podpisano k pechatu) of this issue was 3/28/1967.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

# MEASUREMENT TECHNIQUES

A translation of *Izmeritel'naya Tekhnika*

Number 5

May, 1967

## CONTENTS

	Engl./Russ.
Up-to-Date Method for Measuring Moisture. V. E. Melkumyan . . . . .	523 3
Graphic Method for Plotting Distribution Curves of the Composition of Two or Several Distribution. L. A. Dryagina . . . . .	527 6
Double Knife-Edge (Single-Arm) Balances. M. I. Tyutikova and E. I. Fedorovich . . . . .	531 9
Circular Scale for Twist-Testing Machines. V. V. Khlebov . . . . .	535 12
Correlation Method for Analyzing Turbulent Pulsations of Velocity in a Narrow Frequency Band. G. P. Morozov-Rostovskii . . . . .	538 14
Evaluation of the Normal Thermodynamic Boiling Temperature of Helium. D. N. Astrov, M. P. Orlova, and G. A. Kytin . . . . .	542 17
Dc Instrument Amplifiers with Photovaristor Transducers. A. M. Ilyukovich . . . . .	545 19
Improved Astatic Filter. G. I. Takhvanov . . . . .	548 22
Coaxial Bolometric Head for Precise Power Measurements in the Range of 0.03-10 GHz. V. I. Krzhimovskii, V. V. Kshimovskii, and I. A. Sergeev . . . . .	554 26
Evaluating the Bandwidth of an IF Amplifier in a Superheterodyne Attenuation Meter. A. D. Emel'yanov . . . . .	557 29
Discrete Method for Measuring the Reflection Factor of Terminal Loads. A. I. El'kind and V. P. Petrov . . . . .	562 32
Raising the Precision in Evaluating Short-Duration Frequency Deviations of UHF Generators. A. A. Os'minin . . . . .	566 35
Diode Voltmeter Errors Due to the Electron-Inertia Effect. B. E. Rabinovich and A. T. Lopareva . . . . .	569 37
Certain Errors in Measuring the Permittivity of Materials with a Large Loss Angle. S. M. Aksel'rod . . . . .	575 41
Absolute Calibration of Measuring Hydrophones in the Audio-Frequency Range. A. N. Golenkov and L. E. Pavlov . . . . .	579 44
Application of Alpha-Radiation Sources for Calibrating and Evaluating the Basic Parameters of Alpha-Spectrometers with Semiconductor Detectors. É. K. Stepanov and N. V. Tyutikov . . . . .	586 49
Investigation of the Power Sensitivity of Fast-Neutron Radiometers. V. I. Fominykh . . . . .	590 53
Method for Plotting and Using Nomograms for Determining the Operating Conditions of Linear Electron Accelerators. E. V. Armenskii, E. G. Pyatnov, and V. D. Chalyi . . . . .	593 55
Application of RL Generators as Frequency Conductometric Transducers. B. A. Lopatin and L. A. Granitskaya . . . . .	596 57
Properties of a Rotational Single-Cylinder Viscosimeter in Plastic Flows. S. I. Kripatovskii and V. I. Rudenko . . . . .	601 61
Impedance Instability of a Transducer during Its Free Filling with Grain. V. V. Dzhemella and V. G. Pustynnikov . . . . .	606 64

(Contd)

Available from Consultants Bureau

	Engl./Russ.
An Objective Method for Measuring the Refraction of Spectacle Lenses. G. I. Strakun . .	610 67
<b>ASSISTANCE TO MEASUREMENT LABORATORY WORKERS</b>	
Testing of Scaleless Measuring Instruments. S. M. Kessel'man and A. M. Kipnis. . . . .	613 70
Testing of Measuring Amplifiers U2-1A (28IM) and 28I. N. I. Kotel'nikov and N. P. Stepanov . . . . .	617 73
Experience in Using Potentiometer R308. K. P. Karagunis . . . . .	619 74
<b>EXCHANGE OF EXPERIENCE</b>	
Providing Measurement-Equipment Testing under Operating Conditions. K. I. Nazarov. .	621 75
Experience in Operating the Metrological Service at the "Krasnyi Oktyabr'" Volgograd Plant. E. A. Makarov and L. V. Orlova . . . . .	624 78
<b>INFORMATION</b>	
Twentieth Anniversary of the Scientific and Technical Society of the Instrument- Making Industry. J. N. Grishina. . . . .	626 79
I. V. Poroikov. . . . .	628 80
<b>ABSTRACTS</b>	
Production Control of Gears at the Ansaldo Engineering Plant. A. M. Bubentsov and P. N. Polukanin. . . . .	629 81
[Interference Measurement of a Geodetic Base of the International Bureau of Weights and Measures (P. Carré and J. Hamon, Metrologia, No. 4, 1966). . . . .	83]
[The Radiation Measurements of the Freezing Point of Gold (J. A. Hall, Metrologia, No. 4, 1966). . . . .	84]
<b>BRIEF REPORTS AND LETTERS TO THE EDITOR</b>	
System Accounting for the Acquisition, Stocking, Testing, and Movement of Control and Measuring Instruments. N. I. Suslov. . . . .	631 85
Strain-Gauge Diesel-Oil Pressure Transducer for a Nonamplifying Measurement Circuit. V. I. Kirsa. . . . .	633 86
Measuring Instrument Repairs. M. N. Nikolaev . . . . .	635 87
Utilization of Mobile Test Laboratories. K. P. Magdesyan . . . . .	636 88
Capacitance Measurements at Fixed Frequencies with Instrument E12-1. B. N. Kolodiev and Ya. P. Sinuk. . . . .	637 89
Numerical Quantities Theory and Its Application in Molecular Physics. A. E. Shtandel'. .	638 89
Method for Timing Several Simultaneous Processes. V. I. Butov . . . . .	640 91
Improvements in a Laboratory Climatic Chamber LK-1. A. I. Plakorski and I. I. Petrosyuk. . . . .	642 92
Linear Transducer of Resistance Deviations to a Dc Voltage. L. I. Volgin . . . . .	644 93
<b>BIBLIOGRAPHY.</b> Reviewed by I. I. Rubashkin . . . . .	646 94

**NOTE**

The Table of Contents lists all material that appeared in the original Russian journal. Items originally published in English or generally available in the West are not included in the translation and are shown in brackets. Whenever possible, the English-language source containing the omitted items is given.

The Russian press date (podpisano k pechati) of this issue was 4/25/1967.  
Publication therefore did not occur prior to this date, but must be assumed  
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

IZVESTIYA AKADEMII NAUK SSSR

No. 1-6, 1966

## RUSSIAN METALLURGY

English translation of  
IZVESTIYA AKADEMII NAUK SSSR  
METALLY

*Editorial Board*

A. I. Belyaev, A. P. Gulyaev, A. S. Zamoyskiy, A. N. Krestovnikov, B. Ya. Lyubov,  
B. A. Movchan, A. N. Morozov, I. M. Pavlov, M. V. Pridantsev, N. N. Rykalin,  
E. M. Savitskiy, N. N. Sirota, N. M. Skiyarov, K. F. Starodubov, L. M. Tsylev,  
V. I. Yavoytskiy.

*Translation Editor:* Eugene Gros, Dipl. Ing., London

## INDEX

1966

Subject Index . . . . . 3-18

Author Index . . . . . 19-22

### Tables of Contents

No. 1 . . . . . 23-24

No. 2 . . . . . 25-27

No. 3 . . . . . 27-29

No. 4 . . . . . 29-31

No. 5 . . . . . 31-33

No. 6 . . . . . 33-35

Single issues	£6.0.0 (\$18.00)
Single article reprints	£4.0.0 (\$12.00)
Annual subscription	£32.0.0 (\$96.00)



© SCIENTIFIC INFORMATION CONSULTANTS LIMITED  
661, Finchley Road, London, N.W.2

Scientific Information Consultants Limited

# RUSSIAN METALLURGY

English translation of  
IZVESTIYA AKADEMII NAUK SSSR  
METALLY

The journal covers ferrous and non-ferrous metallurgy, including ore beneficiation, extraction and refining, mechanical properties at ordinary and elevated temperatures, alloy compositions and structures, effects of impurities and methods of purification, methods of testing both for routine examination and for research investigations, etc. Increasing attention is being paid to metals and alloys with new properties, such as, very high strength, resistance to high temperatures, radiation and corrosion, superconductor and semiconductor materials.

Bimonthly

© Scientific Information Consultants Ltd., 661 Finchley Road, London, N.W.2

## TABLE OF CONTENTS

No. 6, 1966

	Page	orig. trans.
Efimenko G. G. and Kovalev D. A. IMPROVING SINTER STRENGTH BY CONTROLLED CHANGES IN STRUCTURE (Abr. tr.)	3	3
Belov L. V. MELTING OF A STEEL PLATE UNDER A LAYER OF LIQUID PIG IRON (Abs.)	11	6
Vatolin N. A. and Kern E. M. DENSITY OF MOLTEN ALLOYS OF IRON WITH PHOSPHORUS AND SULPHUR (Abr. tr.)	21	7
Urazova V. A., Levenets N. P., Samarin A. M. NON-METALLIC INCLUSIONS IN IRON CONTAINING P AND O Nikitin B. M., Litvinova T. I., Raychenko T. F. PHASE COMPOSITION OF FLUORINE-CONTAINING SLAGS FOR ELECTROSLAG REMELTING (Abr. tr.)	31	14
Lainer A. L., Nazirov A. Kh. MINERALOGICAL COMPOSITION OF LIME-SPODUMENE SINTERS (Abs.)	36	15
Ni L. P., Romanov L. G., Osipova E. F. INVESTIGATION OF THE SOLUBILITY OF SODIUM HYDRO- ALUMINOSILICATE IN ALUMINATE SOLUTIONS (Abr. tr.)	40	16
Antifeyev V. A., Baskakov A. P., Lumin A. P., Onokin V. F. INVESTIGATION OF TWO-STAGE GAS COMBUSTION IN A FLUIDIZED BED	47	17
Shimanskiy Yu. N. TEMPERATURE PULSATIONS IN A BED FLUIDIZED BY WATER	51	21
Vorob'ev G. M., Popova V. I. QUANTITATIVE INVESTIGATION OF THE ORIENTATIONS IN ROLLED IRON (Abr. tr.)	54	23
Gulyayev A. P., Ustimenko M. Yu. INFLUENCE OF PLASTIC DEFORMATION ON THE PROPERTIES OF HEAT-RESISTING ALLOY (EP543) (Abr. tr.)	63	27
Aleksandrov V. L., Bogachev I. N., Mints R. I. SOME FEATURES OF THE BEHAVIOUR OF AUSTENITIC STEELS DURING CYCLIC LOADING	68	29

(Contd)

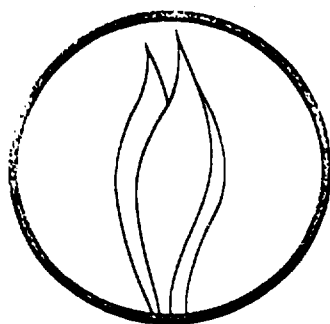
Available from Scientific Information Consultants Limited



IZVESTIYA AKADEMII NAUK SSSR  
No. 6, 1966

Fomichev O. I., Bel'chenko G. I., Baranov A. A. REDISTRIBUTION OF DISLOCATIONS IN CEMENTITE DURING HEATING	73	33
Pogrebnoy E. N., Zhak K. M. THE POLYGONISATION OF HOT-DEFORMED SILICON IRON		
Bokshetyn S. K., Zhukhovitskiy A. A., Kishkin S. T., Moroz L. M., Chaplygin V. S. INVESTIGATION OF DIFFUSION ALONG PHASE BOUNDARIES	83	42
Shilova E. I., Nikitaeva O. G., Vasil'eva E. N. EFFECT OF GRAIN SIZE ON THE PROPERTIES OF LIGHT ALLOY AK4-1 SHEET (Abr. tr.)	89	47
Lokshin F. L., Vainblat Yu. M., Korobov O. S., Shakhanova G. V. DECOMPOSITION KINETICS OF THE SATURATED SOLID SOLUTION IN THE ALUMINIUM ALLOY D-16 (Abr. tr.)	97	52
Novikov I. I., Shashkov D. P. INFLUENCE OF THE MELTING AND ANNEALING CONDITIONS ON THE BRITTLE-DUCTILE TRANSITION IN INTERMETALLIC COMPOUNDS (Abr. tr.)	101	54
Abramyan E. A., Ivanov L. I. INFLUENCE OF ORDERING ON THE HIGH TEMPERATURE CREEP OF Fe-Al ALLOYS	110	62
Drits M. E., Sviderskaya Z. A., Rokhlin L. L. EFFECTS OF ALLOYING AND HEAT TREATMENT ON THE ATTENUATION OF ULTRASONIC OSCILLATIONS IN MAGNESIUM	114	65
Zakharov A. M., Savitskiy E. M. INVESTIGATION OF THE PHASE DIAGRAM OF THE TERNARY W-Mo-Ti SYSTEM (Abr. tr.)	121	70
Markiv V. Ya., Matushevskaya N. F., Kuz'ma Yu. B. X-RAY INVESTIGATION OF THE Nb-Ni-Al SYSTEM (Abs.)	127	72
Fedorov T. F., Gladyshevskiy E. I., Gorshkova L. V. PHASE EQUILIBRIA IN THE TERNARY Hf-Re-C SYSTEM (Abr. tr.)	134	75
Sveshnikova G. A., Borzdyka A. M. SOLUBILITY OF NIOBIUM IN NICKEL-CHROMIUM SOLID SOLUTION (Abs.)	137	77
Gurin V. N., Obukhov A. P., Terent'eva Z. P., Bashinskaya I. R. INTERMETALLIC COMPOUND IN THE Nb-Zn SYSTEM (Abr. tr.)	142	78
Funke V. F., Panov V. S. STRUCTURE AND PROPERTIES OF SOLID SOLUTIONS OF WC IN TiC, NbC AND TaC (Abs.)	146	80
Petrunichev V. A., Mikhalev V. I. THE DEVELOPMENT OF A PLASMA METHOD FOR PRODUCING SPHERICAL POWDERS FROM HIGH MELTING POINT MATERIALS	154	82
Nikitin V. I. MECHANISM OF CREEP STRENGTH REDUCTION OF METALS IN SURFACE ACTIVE LIQUID METALS (Abr. tr.)	160	87
Kruglykh A. A., Pavlov V. S., Smirnov Yu. N. INFLUENCE OF PURIFICATION BY ZONE REFINING ON THE OXIDATION OF CERIUM	169	91
ALL-UNION CONFERENCE ON THE PHASE DIAGRAMS OF METALLIC SYSTEMS	173	94

Available from Scientific Information Consultants Limited



# Cybernetics

The Faraday Press  
cover-to-cover translation of *Kibernetika*

## Contents

Volume 2, Number 2 • March - April 1966

### Editorial Board

*Kibernetika*

a publication of the  
Academy of Sciences UkrSSR

V. M. Glushkov,  
Editor in Chief  
V. S. Mikhailovich,  
Associate Editor  
N. S. Furs,  
Associate Editor  
N. P. Boronov  
A. A. Dorodnitsyn  
A. P. Ershov  
Yu. I. Zhuravlev  
L. A. Kaluzhnin  
V. A. Kovalevskii  
V. S. Korolyuk  
O. S. Kulagina  
A. A. Letichevskii  
O. B. Lupanov  
A. A. Lyapunov  
A. I. Mal'tsev  
N. N. Moiseev  
Yu. A. Olenik-Ovod  
G. E. Pukhov  
I. V. Romanovskii  
S. L. Sobolev  
E. F. Skorokhod'ko  
V. A. Statuyavichyus  
A. I. Stegala  
V. V. Shkurba  
E. L. Yushchenko

### Faraday Advisory Editors

M. Levison  
University of London  
L. W. Neustadt  
University of Southern  
California

Single Issue: \$35

Annual Subscription: \$125

	Russian page	English page
Local Algorithms for the Calculation of Information, Part II. Yu. I. Zhuravlev. . . . .	1	1
The Decidability of Mechanical Theories. G. P. Dishkhat . . . . .	12	9
Some Problems in Solving Systems of Differential Equations with Extrapolation Digital Integrators on the Initial Interval. A. V. Kalyaev and O. N. P'yavchenko . . . .	13	10
Investigation of Error in Double Delta Modulation. G. G. Men'shikov . . . . .	18	14
Simulation of an Automaton for Selecting Guidance System Coefficients. J. Olszewski. . . . .	26	21
Sequential Optimization Methods in Problems of Operation Scheduling. V. S. Mikhalevich and V. V. Shkurba . . .	34	28
Application of Optimal Control Theory to Problems of Optimal Programming. N. N. Moiseev . . . . .	41	34
On Variation Principles in Linguistics. Yu. A. Shreider. . .	49	41
Soviet Cybernetics Technology: VIII. Report on the Algorithmic Language ALGEC (Final Version). M. A. Korolev, K. S. Kuz'min, S. S. Lavrov, A. A. Letichevskii, G. K. Stoliarov, and M. R. Shura-Bura . . . . .	57	48

© 1967 by The Faraday Press, Inc.

All rights reserved. This publication or parts thereof may not  
be reproduced in any form without permission of the publisher.

## The Faraday Press, Inc.

84 FIFTH AVENUE, NEW YORK, N. Y. 10011

Available from The Faraday Press, Inc.

Best Available Copy

KRISTALLOGRAFIYA  
EDITORIAL BOARD

N. V. Belov  
G. B. Bokil  
A. A. Chernov  
V. L. Indenbom  
A. I. Kitaigorodskii  
S. G. Pinsker  
I. I. Shafrenovskii  
A. V. Shubnikov  
(Editor)  
Institute of Crystallography  
Academy of Sciences of the USSR,  
Moscow  
L. A. Shvachko  
B. K. Vainshtein  
G. S. Zhdanov  
(Associate Editor)  
I. S. Zheludev  
(Secretary)

# Soviet Physics CRYSTALLOGRAPHY

A Translation of "Kristallografiya"

(Russian Original Vol. 12, No. 3, pp. 387-554, May-June, 1967)

Vol. 12, No. 3, pp. 335-488

November-December, 1967

## CONTENTS

	PAGE	RUSS. PAGE
Ilarion Ilarionovich Shafrenovskii (on His Sixtieth Birthday) . . . . .	335	387
Convergence Problems in Crystal Structure Refinement by the Least Squares Method. R. A. Brusentsev . . . . . (E/T)	337	389
RA <sub>3</sub> Compounds in Rare Earth - Aluminum Systems and Their Crystal Structures. I. I. Zalutskii and P. I. Kripyakevich . . . . . (E)	341	394
Cation Distributions in Ferrites with Hexagonal Structures. M. A. Vinnik . . . . . (E/T)	344	398
Least-Squares Refinement of the Crystal Structures of 1,5-Dibromo- and 1,5-Diodoanthraquinone. L. A. Chetkina and G. A. Gol'der . . . . . (E)	349	404
A Preliminary Model of the Benzophenone Structure. E. B. Vul and G. M. Lobanova . . . . . (E)	355	411
Crystal Structure of the Modifications of p-Bromodiazobenzene. Yu. A. Omel'chenko and Yu. D. Kondrashev . . . . . (E)	359	416
X-Ray Diffraction Method of Determining Substructure. B. Ya. Pines, E. E. Badiyan, A. F. Sirenko, and D. D. Solnyshkin . . . . . (T/E)	365	423
Determination of Elementary Fiber Dimensions in Chrysotile Asbestos. D. M. Kheiker, I. M. Flantsbaum, and L. V. Bubeleva . . . . . (E/T)	370	430
Optical Study of the Phase Composition of Barium Titanate with Small Additions of Chromium Oxide. T. N. Verbitskaya and T. N. Burakova . . . . . (E)	375	436
Temperature and Wavelength Dependences of the Electrooptical Coefficient r <sub>33</sub> in ADP Crystals. O. G. Blokh and L. F. Lutsiv-Shumskii . . . . . (E)	380	443
Some Physical Properties of Rubidium Dihydrogen Phosphate Single Crystals. A. S. Vasilevskaya, M. F. Koldobskaya, L. G. Lomova, V. P. Popova, T. A. Regul'skaya, I. S. Rez, Yu. P. Sobesskil, A. S. Sonin, and V. S. Suvorov . . . . . (E)	383	447
Electrooptical Properties of Triglycine Sulfate. IV. Deuterated Triglycine Sulfate. A. S. Sonin and A. S. Vasilevskaya . . . . . (E)	386	451
Spontaneous Electrooptical Effect in Rochelle Salt Crystals. O. G. Blokh and L. F. Lutsiv-Shumskii . . . . . (E)	389	455
Electrooptical Properties of Rochelle Salt. A. T. Anistratov and K. S. Aleksandrov . . . . . (E)	393	459
Measurement of the Electromechanical and Electrooptical Coefficients of an ADP Single Crystal Using a Twyman Interferometer. E. V. Sidnenko and I. S. Zheludev . . . . . (E)	397	465

Copyright © 1967 by the American Institute of Physics

(Contd.)

Available from Am Institute of Phys

		PAGE	RUSS. PAGE
X-Ray and Electrical Studies of the System $\text{Bi}_4\text{Ti}_3\text{O}_{12} - \text{BiFeO}_3$ . <u>I. G. Ismailzade, V. I. Nesterenko, F. A. Mirishli, and P. G. Rustamov</u> . . . . .	(E)	400	468
Movement of Dislocations in Iron Microcrystals. <u>I. P. Kushnir</u> . . . . .	(E)	405	474
Study of X-Ray Diffraction Images of Some Dislocations Generated in the Plastic Deformation of Germanium. <u>L. I. Datsenko and M. Ya. Skorokhod</u> . . . . .	(E)	409	480
Influence of Some Crystal Defects on the Morphology of Its Growing Surface. II. Formation of Defects in the Growing over of Inclusions, and the Part Played by Block Boundaries at High Supersaturation. <u>E. D. Dukova</u> . . . . .	(E/T)	413	483
Synthesis of Otavite Crystals and Observation of the EPR Spectra of $\text{Co}^{+2}$ Ions in Them. <u>A. S. Borovik-Romanov, N. Yu. Ikornikova, V. F. Meshcheryakov, and E. G. Rudashevskii</u> . . . . .	(E)	417	488
Healing of Cracks in Rock Salt Crystals. <u>Yu. V. Grdina and V. V. Neverov</u> . . . . .	(E)	421	493
Characteristics of the Growth of Silicon Single Crystals from the Gas Phase. <u>I. V. Salli, É. S. Fal'kevich, Yu. S. Dement'ev, E. N. Chukal'skii, V. V. Belousova, and V. G. Khrebtishchev</u> . . . . .	(T/E)	425	499
BRIEF COMMUNICATIONS			
Thermodynamic Interpretation of Nonequilibrium Forms of Crystals. <u>E. B. Treivus</u> . . . . .	(T)	432	508
Program for Calculation of Interplanar Spacings in the ALGOL-60 Language. <u>F. A. Brusentsev and A. N. Rebenko</u> . . . . .	(E)	434	510
Crystal Structure of $\text{SrMoO}_4$ . <u>Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov</u> . . . . .	(E)	436	511
The Compound $\text{LaCo}_3$ and Its Crystal Structure. <u>O. S. Zarechnyuk and P. I. Kripyakevich</u> . . . . .	(E)	438	512
Atomic Scattering Factors for X Rays and Effective Charges of Atoms in Semiconductors of Type $\text{AIIIbV}$ . <u>R. I. Anishchenko and A. N. Gusatinskii</u> . . . . .	(T)	440	514
Effect of Temperature on the Scattering of Light by Liquid Crystals of the Cholesterol Type. <u>A. P. Kapustin</u> . . . . .	(E)	443	516
Crystallo-Optical Properties of Vanadates of Alkali Metals of the $\text{MeVO}_3$ Type. <u>M. P. Glazyrin</u> . . . . .	(E)	444	516
Nonlinear Optical Properties of Single Crystals of Deuterated Ammonium Dihydrogen Phosphate. <u>A. S. Vasilevakaya, E. N. Volkova, V. A. Koptsik, L. N. Rashkovich, T. A. Regul'skaya, I. S. Rez, A. S. Sonin, and V. S. Suvorov</u> . . . . .	(E)	446	518
Anisotropy of Thermoelectric Properties in Chromium Disilicide and in Single Crystals of the Highest Silicide of Manganese. <u>B. K. Voronov, L. D. Dudkin, and N. N. Trusova</u> . . . . .	(E)	448	519
Interaction of Dislocations with Block Boundaries in $\text{NaCl}$ Crystals. <u>L. I. Mirkin and T. M. Aver'yanova</u> . . . . .	(E)	450	521
Reflection of Atomic Beams from the Surface of Single Crystals. <u>L. D. Raigorodskii</u> . . . . .	(E)	452	522
Method for the Selective Etching of Ammonium Dihydrogen Phosphate Crystals. <u>V. A. Meleshina, T. F. Chernysheva, and N. B. Russova</u> . . . . .	(E)	454	523
Effect of Indium Impurity on the Crystallization Process of Selenium. <u>V. N. Lange, T. I. Lange, and V. A. Titov</u> . . . . .	(E)	456	525
On the Theory of Crystallization. <u>D. L. Leitschkis</u> . . . . .	(T)	459	527
Growth Mechanism of $\alpha$ -Modification Centers in High-Purity Tin. <u>A. I. Bykhovskii, L. N. Larikov and V. M. Fal'chenko</u> . . . . .	(E/T)	460	528
Effect of Aluminum Ions on the Growth Rate of Potassium Dihydrogen Phosphate Crystal Faces. <u>V. N. Portnov</u> . . . . .	(E)	463	530

(Contd)

Available from Am Institute of Phys

KRISTALLOGRAFIYA  
Vol 12, No. 3, Nov-Dec 1967

		PAGE	RUSS. PAGE
The Growing of Potassium Dichromate Crystals in the Form of a Growth Pyramid of One (001) Face. <u>V. F. Parvov</u> .....	(E)	465	532
The Growing of Magnesium Single Crystals. <u>V. F. Zelenskii and I. A. Petel'guzov</u> .....	(E)	466	533
Preparation of GaAs Epitaxial Films by the Sandwich Method. <u>A. V. Kovda and S. A. Semiletov</u> .....	(E)	468	535
Structure of Epitaxial CdS Thin Films Obtained by Sputtering in Vacuum. <u>Z. A. Magomedov and S. A. Semiletov</u> .....	(E)	470	536
Growth of Large Hematite Crystals from Solution in a $\text{Bi}_2\text{O}_3 - \text{Na}_2\text{CO}_3$ (Flux) Melt. <u>R. A. Voskanyan and I. S. Zheludev</u> .....	(E)	473	539
Conoscopy of Elongated Capron Monofilaments. <u>M. A. Genina and N. Ya. Onishchenko</u> .....	(E)	475	540
Helium Cryostat for a Neutron Diffractometer. <u>V. S. Golovkin, V. N. Bykov, N. V. Khoteev, and V. A. Levdik</u> .....	(E)	477	542
<b>CHRONICLES</b>			
Problems of Crystallography (Results of the VII International Congress of Crystallographers). <u>V. I. Simonov</u> .....	(R)	479	544

Available from Am Institute of Phys

## TRANSLATIONS ON NORTH KOREA

No. 62

(Translation of Kulloja, No 7, 1967)

This serial publication contains translations of political, economic, and sociological articles on North Korea. Complete bibliographic information accompanies each article.

### CONTENTS

	<u>Page</u>
Parallel Development of Economy and Defense	1
Loyalty to Kim Il-song Stressed	11
Improvement and Strengthening of Labor Administration	27
Development of Building Material Industry	40
Invincible Power of the Korean People	51
Fundamental of the American Imperialist Policy	63
Crisis of American Imperialism	75
100th Anniversary of Karl Marx's <u>Das Kapital</u>	87

AVAILABLE FROM JPRS 43,222

OPTIKA I SPEKTROSKOPIYA  
Vol 23, No. 1, July 1967

VOL. XXIII, NO. 1

OPTICS AND SPECTROSCOPY

JULY 1967

CONTENTS

(Numbers in parentheses are original Russian page numbers.  
These Russian page numbers are also quoted at the head of each paper.)

Theory of Intensity Beats of Secondary Radiation of an Atom with a Nondiagonal Extinction Matrix . . . . .	V. A. Morozov	1	(3)
Calculation of the Effective Potentials of Many-Electron Atoms from Spectroscopic Data . . . . .	N. I. Zhirnov	5	(10)
Excitation Cross Sections Near the Threshold for Electron-Atom Collisions . . . . .	O. B. Shpenik and I. P. Zapesochnyi	8	(15)
Oscillator Strengths and Effective Cross Sections of the Resonance Lines of Gallium and Indium Atoms for Line-Broadening Collisions . . . . .	N. P. Penkin and L. N. Shabanova	11	(22)
A Study of Collision Processes Involving Excited Neon Atoms in a Helium-Neon Laser . . . . .	V. M. Kaslin, G. G. Petrash, and A. S. Khaikin	14	(28)
Connection Between the Einstein Coefficients in the Case of a Condensed Medium and Energy Levels of Finite Width . . . . .	N. G. Bakhshiev, O. P. Girin, and V. S. Libov	16	(33)
Relative Position of the $\pi\pi^*$ and $n\pi^*$ States of Molecules and Their Optical Properties. III. Four Lumi- nescent Types of Molecules . . . . .	V. G. Plotnikov	20	(39)
Consideration of Anharmonicity in the Calculation of Vibrations of Polyatomic Molecules . . . . .	B. L. Sadullaev and M. M. Sushchinskii	24	(46)
A New Approach to the Calculation of Raman Intensities . . . . .	B. S. Averbukh	28	(54)
Calculation of Raman Scattering Cross Sections from Spectroscopic Data . . . . .	V. I. Beresin, M. A. Kovner, and B. A. Medvedev	32	(62)
On the Shape of the NMR Line in a Solid in the Case of Long Spin-Lattice Relaxation Time . . . . .	I. Ya. Slonim and Ya. G. Urman	34	(67)
Theory of the Optical Activity of Molecules . . . . .	K. V. Konstantinavichus and M. V. Volkenstein	38	(74)
Calculation of Induced Optical Activity on the Basis of the Free-Electron Model . . . . .	K. V. Konstantinavichus and M. V. Volkenstein	41	(80)
Electronic Spectra of 1,3,5-Trisubstituted 2-Pyrazolines and Some of Their Structural Analogs . . . . .	R. N. Nurmukhametov and V. B. Tishchenko	43	(83)
Manifestation of Intramolecular Vibrations in Luminescence Spectra of Uranyl Compounds . . . . .	L. V. Volodko, A. N. Sevchenko, and D. S. Umreiko	46	(89)
Absorption and Emission Spectra of $\text{Er}^{3+}$ in $\text{Sc}_2\text{O}_3$ . . . . .	R. K. Pirinchieva	49	(96)
Effect of Chloride Ions on Activator Distribution in $\text{NaI(Tl)}$ Crystals Grown from the Melt . . . . .	L. M. Shamovskii, A. A. Dunina, and M. A. Vetrova	52	(102)
Nonmonotonic Variation of Certain Properties in the Zinc-Cadmium Sulfide Luminor Series . . . . .	A. M. Gurvich and M. A. Ilina	55	(106)
Interaction of Luminescence Centers During Thermal Decomposition of $\text{ZnS(Se)-Ag}$ Luminors . . . . .	T. V. Oranovskaya and B. M. Gugel	59	(114)
Luminescence of Tin-Activated Double Orthophosphates of Metals of the Second Group of the Periodic System . . . . .	R. A. Babitskaya, F. M. Pekarman, and E. M. Uspenskaya	63	(121)
Effect of Tellurium on the Luminescence Properties of Zinc Sulfide Luminors . . . . .	R. I. Smirnova and O. F. Pron	67	(126)
Polarization Textures for the Near Infrared Radiation . . . . .	G. I. Distler, E. I. Kortukova, A. V. Kotov, V. N. Lebedeva, and V. S. Chudakov	71	(137)
Interference Polarization Filter with Transmission Bands That Can Be Shifted Over a Wide Range of the Spectrum . . . . .	S. B. Ioffe and T. A. Smirnova	74	(143)

(Contents continued on inside back cover)

(Contd.)

Available from Optical Society of America

OPTIKA I SPEKTROSKOPIYA  
Vol 23, No. 1, July 1967

Allowance for the Influence of Surface Films on the Results of Metallo-Optical Measurements . . . . .	I. N. Shklyarevskii, V. P. Kostyuk, and V. R. Karas	76 (147)
The Photoemission Method for Obtaining Mirror and Diffuse Reflection Spectra in the Vacuum Ultraviolet Region of the Spectrum . . . . .	F. I. Vilesov, A. A. Azgrubskii, and M. M. Kirillova	79 (153)
On the Coherent Scattering of Light . . . . .	A. P. Ivanov and A. Ya. Khairullina	83 (155)
<b>SHORT COMMUNICATIONS</b>		
Sensitized Luminescence of Rare Earth Ions in $\text{NaCl:Tr}^{3+}\text{-Se}^{2-}$ Crystals . . . . .	S. A. Sazonova and B. S. Skorobogatov	87 (166)
Excitation of Raman Spectra of Powders with a Gas Laser . . . . .	A. S. Lvova, V. A. Chirkov, V. A. Zubov, and M. M. Sushchinskii	88 (168)
Spectra of Ga v and Ge vi in the Vacuum Ultraviolet . . . . .	E. Ya. Kononov	90 (170)
Derivation of Formulas for Calculating Root-Mean-Square Vibrational Displacements of Atoms and Root-Mean-Square Amplitudes of Oscillations of Internuclear Distances in Polyatomic Molecules . . . . .	L. M. Sverdlov and V. S. Kukina	91 (172)
Use of KS-19 Filter to Smooth Ruby Laser Spikes . . . . .	A. N. Rubinov and V. I. Nikolaev	93 (174)
Mechanism of Xenon Level Population Inversion in the Positive Column of a Helium-Xenon Mixture . . . . .	V. F. Moskalenko, E. P. Ostapchenko, and V. I. Pugin	94 (177)
Multiphoton Ionization of the Hydrogen Atom . . . . .	N. Ya. Shaparev	96 (178)
<b>REPORT</b>		
Symposium on Theoretical Spectroscopy . . . . .		97 (181)
<b>LETTERS TO THE EDITOR</b>		
More on Plasma Diagnostics by the Self-Reversed Contours of Spectral Lines (Reply to N. G. Preobrazhenskii) . . . . .	G. G. Bin and I. S. Fishman	97 (183)

Available from Optical Society of America



CONTENTS

	Page
<i>H. Ignatowska, L. Stach:</i> Evaluation of the $\alpha$ -hydroxybutyric dehydrogenase activity in the diagnosis of myocardial infarct . . . . .	797
<i>M. Ciświcka-Sznajderman:</i> Effect of short-term total starvation on serum free fatty acid and glucose levels in obese subjects . . . . .	804
<i>K. Jasiński, H. Szereszewska:</i> Investigations on the relationship between renal concentrating ability and acidification of the urine I Renal concentrating power at different urine pH . . . . .	810
<i>H. Szereszewska, K. Jasiński:</i> Investigations on the relationship between renal concentrating ability and acidification of the urine. II Renal metabolism of the hydrogen ion in ADH deficiency . . . . .	817
<i>S. Bromberg-Sznek, B. Vertun, L. Radwan, J. Łyczewska:</i> Effect of peritoneal dialysis on the acid-base balance in renal insufficiency . . . . .	822
<i>R. Pietrych, A. Manitius:</i> The effect of certain diuretics on the serum magnesium level. . . . .	829
<i>H. Szymańska, A. Nieczajew, H. Mysliwicz-Rychlik:</i> Seromucoid determination in the differential diagnosis of jaundice . . . . .	835
<i>J. Wysocki:</i> The effect of corticoids on aspartic and alanine transaminases of blood serum in patients with viral hepatitis . . . . .	841
<i>J. Wysocki:</i> Effect of corticoids on serum aldolase activity in viral hepatitis . . . . .	847
<i>I. Kaszewska-Jabłońska:</i> Oral iron loading as a test for the evaluation of absorption impairment in the small intestine . . . . .	851
<i>J. Daszyński, Z. Klenowska:</i> Preliminary investigations upon the plasmapheresis in blood donors . . . . .	857
<i>T. Dorobisz, J. Olearczyk:</i> Remarks on the composition of stored blood and of blood derivatives . . . . .	860
<i>J. Hankiewicz, B. Raczynska:</i> An attempt to differentiate serum alkaline phosphatase with chloroform . . . . .	867
<i>M. Wasilewski, D. Gajl:</i> Early results of tele- $\gamma$ <sup>60</sup> Co-therapy of carcinoma of the oral cavity . . . . .	872
<i>A. Urban, J. Oszaeki, K. Szczygiel:</i> Squamous cell metaplasia in gastric carcinoma . . . . .	879
<i>T. Dorobisz, W. Dzierżkowska:</i> Serological complications in surgical patients . . . . .	895
<i>J. Nielubowicz, T. Orłowski, W. Rowiński, J. Szczerbań, M. Szostek, B. Kamiński, W. Olszewski, J. Ładygin, M. Lao, L. Gradowska:</i> Kidney transplantation using kidney taken from a dead body. A case report . . . . .	902
<i>E. Polomski:</i> The effect of sympathectomy and adrenalectomy on vascularization of extremities in obliterative arteritis . . . . .	908
<i>J. Dackiewicz:</i> Modification of plastic operation for hydronephrosis with preservation of anomalous renal vessel . . . . .	918
<i>M. Wajtowicz, J. Dybicki, S. Wrzolek, T. Bartoszewicz:</i> The effect of denervation on hyperemic ventricular fibrillation in dog . . . . .	924
<i>T. Kraska:</i> An experimental model for studying hemodynamic changes due to evoked heart arrhythmia — particularly to ventricular tachycardia . . . . .	928
<i>T. Kraska:</i> Selected parameters of circulatory hemodynamics during experimental ventricular tachycardia in dog . . . . .	935
<i>W. Kawiak, Z. Stelmasiak:</i> Investigations on glucose metabolism in patients with cerebrovascular accidents. I Intravenous test of glucose tolerance in patients after cerebral stroke . . . . .	942
<i>W. Kawiak, Z. Stelmasiak:</i> Investigations on glucose metabolism in patients with cerebrovascular accidents. II Insulin and epinephrine loading tests in patients after cerebral stroke . . . . .	950
<i>W. Jakimowicz, B. Pajók, J. Przybyłowicz:</i> Muscle tone in the paretic extremities in case of brain softening in the area vascularized by the middle cerebral artery . . . . .	957

(Contd)

Available from CFBTI TT 67-56008/4

POLSKIE ARCHIWUM MED CYNY WEWNETRZNEJ  
Vol 37, No. 4, 1966

	Page
<i>J. de Walden</i> : Influence of blood group on the therapeutic effect of chlorpromazine .	962
<i>J. Wislawski, Z. Sadowski, W. Leszniewski</i> : Arteriovenous aneurysms of the brain and cerebellum . . . . .	966
<i>J. Haftek</i> : Effect of heat on the rate of regeneration of sensory nerve fibers . . . . .	972
<i>J. Dymecki</i> : Infarctions in the "last frontier" vascularization areas of the brain. Pathomechanism and morphological features . . . . .	979
<i>P. Kozłowski, J. Dymecki</i> : The angiographic picture of the ophthalmic artery in frontal meningiomas . . . . .	988
<i>J. Kopeć</i> : Transistor of electric network interferences and its application during electroencephalographic registration . . . . .	996
<i>W. Graban</i> : Dynamics of development of potassium and rubidium ( <sup>40</sup> K and <sup>86</sup> Rb) disturbances in various parts of denervated muscle . . . . .	1003
<i>S. Pużyński, A. Kalinowski</i> : Effect of serum from a case of hepatolenticular degeneration on the activity of serum ceruloplasmin from healthy subjects and in schizophrenics . . . . .	1009
<i>S. Pużyński, A. Kalinowski</i> : Studies on the influence of pH on serum ceruloplasmin activity in schizophrenics. Preliminary communication . . . . .	1016
<i>S. Słowik</i> : Urinary excretion of 3-methoxy-4-hydroxy-mandelic acid in patients with chronic schizopherenia . . . . .	1022

Available from CFSTI TT 67-5008/4

**VESNIK PREMENJENA GEOFIZIKA**  
**Series C, no. 6, 1965**

**Chapter I**

	Page
<b>PHYSICAL AND GEOLOGICAL CHARACTERISTICS OF THE DINARIDES..</b>	<b>5</b>
1.1. Basic geological characteristics pertinent to oil .....	5
1.2. Physical characteristics of the lithological members .....	6
1.2.1. Data analysis .....	7

**Chapter II**

<b>SEISMO-GEOLOGICAL CHARACTERISTICS OF DIFFERENT REGION IN THE DINARIDES .....</b>	<b>11</b>
2.1. Conditions for generating reflective seismic waves .....	11
2.1.1. Zone with flysch rocks .....	12
2.1.2. Zone with carbonatic rocks .....	14
2.1.3. Zone with carbonatic and clastic rocks .....	15
2.1.4. Zone with older flysch-like and clastic rocks .....	16
2.2. Characteristics of waves registered in the Dinarides .....	17
2.2.1. Zone with carbonatic rocks .....	17
2.2.1.1. Statistical characteristics .....	17
2.2.1.1.1. Distribution curves .....	17
2.2.1.1.2. Correlation characteristics of registered waves .....	18
2.2.1.2. Frequency characteristics .....	23
2.2.2. Zone with younger flysch rocks .....	30
2.2.3. Zone with carbonatic and clastic rocks .....	32
2.2.4. Zone with older flysch-like and clastic rocks .....	32
2.2.5. Frequency characteristics of in-phase registered reflected waves in the Dinaric area .....	32
2.2.6 The accuracy of determining a frequency spectrum .....	36
2.2.7 An example of calculating a frequency spectrum .....	37

**Chapter III**

<b>EFFECTS OF GROUND SURFACE ON WAVE PATTERN CHARACTERISTICS</b>	<b>44</b>
3.1. Surface waves .....	44
3.1.1. Ulcinj .....	45
3.1.2. Hvar .....	46
3.2. Sound waves .....	47
3.3. Topographic effect .....	48

**Chapter IV**

<b>CONDITIONS FOR OPTIMAL REGISTRATION OF REFLECTED WAVES ....</b>	<b>49</b>
4.1. Optimum method of generating waves .....	49
4.1.1. The medium .....	49
4.1.2. Wave source characteristics and types .....	51
4.1.3. Choice of number of holes and distance between them; shooting in the carbonatic rocks .....	52
4.2. Optimum conditions for receiving reflected waves .....	56
4.2.1. Geophone separation .....	56

(Contd)

Available from CFSTI TT 65-50403/3

VESNIK PREMENJENA GEOFIZIKA  
Series C, No. 6, 1965

	Page
4.2.2. Number of geophones per group .....	59
4.2.3. The optimum geophone pattern .....	64
4.3. System of investigation .....	64
4.4. The characteristics of waves in interference zones .....	66
Chapter V	
SEISMIC WAVE SPECTRUM DEFORMATIONS DUE TO THE RECORDING SYSTEM .....	74
Chapter VI	
RESULTS OF SEISMIC PROSPECTING IN THE DINARIDES .....	88
Chapter VII	
ECONOMICS OF SEISMIC INVESTIGATIONS IN THE DINARIDES .....	90
References .....	91

Available from CFSTI TT 65-50403/3

# RADIO ENGINEERING AND ELECTRONIC PHYSICS

РАДИОТЕХНИКА И ЭЛЕКТРОНИКА

RADIOTEKHNIKA I ELEKTRONIKA

Vol 12, No. 5, May 1967

NUMBER 5

1967

## CONTENTS

	Page
G. M. Sirelkov: The Dense Model of the Venus Ionosphere .....	721
O. Ye. Antonov: Optimum Detection of Signals in Nongaussian Noise. Detection of a Signal of Unknown Amplitude and Phase .....	727
V. A. Geranin: Variance of the Number of Excursions in a Segment of Stationary Gaussian Noise .....	735
N. G. Gatkin, V. A. Geranin, M. I. Karnovskiy, L. G. Krasnyy and V. G. Lozovik: Average Dwell Time and Average Duration of Positive Excursions of the Sum of a Signal and Gaussian Noise .....	739
Yu. G. Sosulin: Optimum Reception of Pulsed Signals in the Presence of Noise. ....	745
Ye. F. Babushkin and A. P. Rodimov: Some Statistical Characteristics of the Argument of the Phasor of a Partially Polarized Wave .....	754
V. A. Potekhin, S. G. Zubkovich and A. P. Rodimov: Statistical Properties of Partially Polarized Signals in the Presence of Unpolarized Noise .....	761
B. M. Gerasimov: Resolution Capability of Tracking Instruments .....	768
A. B. Pavlinov and V. A. Sablikov: Properties of a Solid-State Inductance .....	775
V. A. Kuz'min and V. S. Pershenkov: Anomalous Dependence of the Transfer Constant of a Transistor at Small Currents. ....	781
I. V. Ryzhikov, V. I. Pavlichenko, T. G. Kmita, A. Yu. Leyderman and P. M. Karageorgiy-Alkalayev: Carrier Injection into the Heavily Doped Regions of a Silicon Carbide Diode .....	785
I. V. Ryzhikov, V. I. Pavlichenko and T. G. Kmita: Carrier Injection into the Heavily Doped Regions of a $p^+ - n - n^+$ Diode. ....	790
G. A. Kudintseva, G. M. Kuznetsova and V. V. Nikulov: An Investigation of the Emission Properties of Lanthanum Hexaboride Emitters .....	798
A. V. Druzhinin, A. I. Mel'nikov and V. I. Nekrasov: The Limiting Emission Current of an Impregnated Aluminate Cathode .....	803
K. S. Beynar and B. P. Nikonov: The Emission Properties of Strontium and Calcium Oxides in a Barium Oxide Stream .....	807
A. B. Kiselev and B. P. Nikonov: The Thermionic Emission and Work Function of an Oxide Cathode .....	812
I. L. Tarash: The Thermionic Emission and Nature of Barium Films, Deposited on Nickel .....	816
L. A. Yermolayev and B. Ch. Dyubua: Secondary Electron Emission of Alloys of Tungsten with Molybdenum and Tantalum .....	821
V. M. Smirnov: Steady-State Potential Distributions in Electron-Ion Beams Emitted by a Cylinder or a Sphere .....	825
A. A. Lebedev and A. I. Uvarov: Switching a Symmetrical p-n-p-n Structure when the Dependence of the Amplification Factors on Current is Taken into Account .....	830
BRIEF COMMUNICATIONS	
O. Ye. Antonov: Optimum Detection of Signals in the Presence of Amplitude-and- Frequency Modulated Noise .....	838
V. I. Vlasimirov: Differential Distribution Law of a Signal Whose Phase Has an Arbitrary Distribution .....	840
G. A. Utkina: Calculation of Signal Detection Characteristics by Means of a Phase Autocorrelator .....	843
Yu. S. Yurchenko: The Noise Immunity of a Monopulse Angle Measuring Instrument Subjected to External Noise .....	846

(Contd)

**RADIOTEKHNIKA I ELEKTRONIKA**  
**Vol 12, No. 5, May 1967**

	Page
Yu. F. Ignatov: The Problem of Simulation in the Theory of Optimum Nonlinear Filtering .....	848
A. N. Morgunov: The Calculation of Phase Variance of Harmonic Oscillations in the Presence of Rayleigh Noise .....	852
M. Ye. Gertsenshteyn and L. G. Solovey: The Noise Matrix of a Passive Multiterminal Network .....	856
A. P. Bekasov: Phase-Frequency Characteristics of Regenerative Circuits .....	858
M. Miller: Application of Gaussian Brackets for the Analysis of Open Resonators and Beam Waveguides .....	862
F. Kaminskiy: Synthesis of Inhomogeneous Lines Consisting of Homogeneous Lossy Segments .....	866
Yu. V. Shubarin: Effect of Internal Reflections on the Operation of a Phasing Section ..	869
G. G. Goshin and A. B. Goroshchenya: Arbitrary Excitation of a Spirally Conducting Plane .....	871
A. K. Stolyarov and I. A. Naumov: Calculation of Phase Shifters for Rectangular Waveguides Using a Toroidal Shaped Ferrite .....	872
Yu. A. Sher: Method of Analyzing a System of Mutually Coupled Nonuniform Lines for Thin-Film Microcircuits .....	875
V. G. Mel'nik, L. I. Kuzovkina and G. A. Yagunova: Cyclic Variations of the Breakdown Voltage in Silicon p-n Junctions .....	877
I. D. Gudkov: Investigation of Low Frequency Noise of the 1/f Type in Reverse-Biased p-n Junctions .....	880
A. S. Taratuta: Calculation of the Noise Level in Forward-Biased p-n Junctions .....	882

**EDITOR'S NOTE**

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh <sup>-1</sup> )
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

Available from Inst. Of E.E.E.

## CONTENTS

	Page
<i>P. Drezgić, Z. Marković and M. Mekinda:</i> Effect of Reduced Tillage on Corn Yield on Chernozem . . . . .	5
<i>M. Penčić, Lj. Rudnjanin and B. Kerečki:</i> Effect of Presowing Treatment of Seed with Different Temperatures on Yield and Moisture Conditions in Maize Crops . . . . .	23
<i>M. Belić and B. Soldatović:</i> The Effect of Litter Size on Pig Development up to Weaning . . . . .	29
<i>R. Jovanović, S. Živković, M. Nenadović and D. Milenković:</i> The Effect of Alfalfa Harvesting Time on the Digestibility of Crude Fiber and Dry Matter . . . . .	39
<i>T. Stojsavljević, B. Milić, and N. Vučurević:</i> On the Storage of Macro and Micro Elements in Alfalfa Leaf and Stem Depending on Harvesting Time . . . . .	49
<i>M. Jovanović:</i> Correlation and Regression Analysis of Golden Delicious Apples after Foliar Nutrition with Oligoelements . . . . .	57
<i>S. Vrabl:</i> Rubbery Wood — A New Virus Disease of Apples in Yugoslavia . . . . .	65
<i>O. Ješić, Z. Jankulovski and Đ. Varga:</i> Analysis of Wheat Production on Bečej Farm in 1964—1965 . . . . .	69
<i>T. Avramović:</i> Business Machines Used for Accounting in Agricultural Enterprises . . . . .	77

Available from CFSTI TT 67-58007/1

STAUB REINHALTUNG DER LUFT  
Vol 27, No. 1, Jan 1967

TABLE OF CONTENTS

Joint Convention of the Association of German Engineers, Working Group Dust Technology, and of the Swiss Association of Engineers and Architects, 6-8 June 1966, Basel, on "Useful Dusts, Their Manufacture and Technical Processing" Part I

Stephany, H. Introduction . . . . .	1
Rumpf, H. The Properties of Useful Dusts . . . . .	3
Schneider, U. The Grinding Properties of the Starting Materials for Useful Dusts . . . . .	16
Pietsch, W. The Agglomerative Behavior of Fine Particles . . . . .	24
Gerth, G. Fine and Ultrafine Comminution in the Manufacture of Useful Dusts . . . . .	42
Kellerwessel, H. Practical Examples of Ultrafine Grinding in the Raw Material Industry . . . . .	46
Kaiser, F. Practical Solutions for Sieving and [Air] Sifting Problems . . . . .	49
Gommel, G. Energy, Abrasion and Comminution in Impact Processes . . . . .	54
Suter, J. G. Energy Consumption and Abrasion During Comminution in the Cement Industry . . . . .	61
Convention Report — "The Development of a New Science of Comminution" — Report of the 2nd European Symposium on "Comminution", Amsterdam, 20 - 23 September 1966 . . . . .	66
Patent Report . . . . .	71

English summaries at the end of the articles  
are reproduced exactly from the original German text

Available from CFSTI TT 67-51408/1



CONTENTS

	Page	Russian Reference
Radiation of Relativistic Electrons in Layered media (E) .....		
..... F. R. Arutyunyan, K. A. Ispiryanyan, A. G. Oganesyan, and A. A. Frangyan	743	52, 1121
On a Method of Investigating Electromagnetic Waves (E) .....		
..... O. A. Zinov'ev	752	52, 1134
Mechanical Effects on Electrode During Plasma Cumulation Near the Axis (E) .....		
..... S. K. Godunov, N. V. Filippov, and T. I. Filippova	755	52, 1138
Mode Interaction in a Gas Laser with Spherical Mirror Resonators (E) .....		
..... I. M. Belousova, G. N. Vinokurov, O. B. Danilov, and N. N. Rozanov	761	52, 1146
Measurement of the Mössbauer Effect in Fe <sup>57</sup> with a Scattering Geometry by Recording 14.4-keV Radiation (E) .....		
..... A. N. Artem'ev, V. V. Sklyarevskii, G. V. Smirnov ..... and E. P. Stepanov	768	52, 1157
Effect of Density and Aggregate State of Target on the Charge Composition of Lithium, Sodium, and Potassium Ion Beams (E) .....		
..... L. I. Pivovarov, L. I. Nikolaichuk, and ..... F. M. Trubchaninov	770	52, 1160
Resonance Charge Exchange of Protons and Deuterons at Low Energies (E) .....		
..... V. A. Belyaev, B. G. Brezhnev, and E. M. Erastov	777	52, 1170
Disintegration of the Front of a Straight Magnetic-sound Shock Wave in a Rarefied Plasma at High Mach Numbers (E) .....		
..... S. P. Zagorodnikov, G. E. Smolkin ..... and G. V. Sholin	783	52, 1178
Investigation of the Mechanism of Carrier Production in Anthracene by Using the Ef- fect of Variation of Photoconductivity in a Magnetic Field (E) .....		
..... E. L. Frankevich and I. A. Sokolik	790	52, 1189
Electric Resistance of Liquid Tellurium at High Pressures (E) .....		
..... S. M. Stishov	795	52, 1196
Phase-memory Effects in the Theory of Spectral Line Broadening in Gases (T) .....		
..... A. I. Burshtein and Yu. I. Naberukhin	799	52, 1202
Radiation in Two-particle Annihilation of an Arbitrarily Polarized Electron-positron Pair (T) .....		
..... D. F. Morozov	806	52, 1212
A Model of Double Nonresonant Charge Exchange (T) .....		
..... R. K. Yanev	812	52, 1221
On the Axioms of Quantum Field Theory (T) .....		
..... D. A. Slavnov	814	52, 1224
Statistical Theory of Inelastic Processes in a Plasma (T) .....		
..... Yu. L. Klimontovich	820	52, 1233
On One Possibility of Making a Medium Transparent by Multiquantum Resonance (T) ..		
..... É. A. Manykin and A. M. Afanas'ev	828	52, 1246
"Most Dangerous" Instabilities of a Collision-dominated Plasma in a Magnetic Field (E) .....		
..... A. B. Mikhailovskii	831	52, 1251
Influence of Interelectron Scattering on the Galvanomagnetic Effects in Strong Electric Fields (T) .....		
..... F. G. Bass, I. B. Levinson, and O. N. Chavchanidze	839	52, 1263
The Two-center Problem in Quantum Mechanics (T) .....		
..... L. I. Ponomarev and ..... T. P. Puzynina	846	52, 1273
Spectrum and Evolution of Boltzmann Systems (T) .....		
..... G. E. Skvortsov	853	52, 1283
Generation of Ultra-short Duration Coherent Light Pulses (T) .....		
..... V. S. Letokhov ..... and V. N. Morozov	862	52, 1296
Fusion of Photons in a Uniform Electromagnetic Field (T) .....		
..... S. S. Sannikov	867	52, 1303
Effect of a Varying Field on Transport Phenomena in Polyatomic Gases (T) .....		
..... V. D. Borman, L. A. Maksimov, and B. I. Nikolaev	868	52, 1305
The Resistance of Metals Located in Strong Magnetic Fields (T) ..		
..... V. G. Peschanskii	872	52, 1312
Discontinuities of Shock Adiabats and the Non-uniqueness of Some Shock Compres- sions (T) .....		
..... E. I. Zababakhin and V. A. Simonenko	876	52, 1317
Some Features of the Josephson Radiation (T) .....		
..... Yu. M. Ivanchenko	878	52, 1320
Nonrelativistic Perturbation Theory for a Discrete Spectrum (T) ..		
..... V. S. Polikanov	882	52, 1326
Nonlinear Spin Waves in Ferromagnets and Antiferromagnets (T) ..		
..... I. A. Akhiezer ..... and A. E. Borovik	885	52, 1332
Dielectric Constant of a Gas of Resonant Atoms (T) .....		
..... Yu. A. Vdovin and ..... V. M. Galitskii	894	(Contd) 1345

(Contents continued on inside back cover)

Available from American Institute of Physics

CONTENTS-continued

Non-Einsteinian Gravitational Equations (T) . . . . .	N. M. Polievktov-Nikoladze	904	52,	1360
Wave Functions and Electron Terms of Molecular Ion $H_2^+$ for Large Internuclear Distances (T) . . . . .	I. V. Komarov and S. Yu. Slavyanov	910	52,	1368
Quasilinear Theory of Runaway Electrons (T) . . . . .	D. D. Ryutov	916	52,	1378
Nonlinear Interactions of Waves in a Weakly Turbulent Plasma with the Participation of Ion Sound (T) . . . . .	A. S. Kingsep	921	52,	1386
Theory of Scattering of Electromagnetic Waves in Ferromagnetic Substances (T) . . . . .	I. A. Akhiezer and Yu. L. Bolotin	925	52,	1393
Turbulent Heating of Ions in a Current Nonisothermal Plasma . . . . .	L. M. Kovrizhnikh	934	52,	1406
Radiative Polarization of Electrons in a Magnetic Field (T) . . . . .	V. N. Baier and V. M. Katkov	944	52,	1422
Bremsstrahlung in the Collision of a Muon with an Electron at Rest (T) . . . . .	V. M. Galitskiĭ and S. R. Kelner	948	52,	1427
The Kapitza-Dirac Effect in a Strong Radiation Field (T) . . . . .	M. V. Fedorov	952	52,	1434
Spiral Structure in a One-dimensional Chain of Spins (T) . . . . .	V. M. Kontorovich and V. M. Tsukernik	960	52,	1446

Available from American Institute of Physics

# JOURNAL OF APPLIED CHEMISTRY of the USSR

A translation of *Zhurnal Prikladnoi Khimii*

Volume 40, Number 1

January, 1967—

## CONTENTS

	Engl./Russ.
Conditions of Preparation of Chromium Borides — T. I. Serebryakova and G. V. Samsonov . .	1 3
Preparation of Zirconium Sulfides — G. N. Dubrovskaya and G. V. Samsonov. . . . .	5 7
Kinetics of the Reaction of Titanium Tetrachloride with Oxygen — I. V. Antipov, B. G. Koshunov, and L. M. Gofman. . . . .	9 11
Study of the Reaction of Hydrogen Sulfide with Sulfuric Acid — A. P. Snurnikov, V. F. Larin, and T. G. Timofeeva . . . . .	13 16
Composition and Properties of Manganic Ammonium Phosphate — I. V. Riskin and T. V. Kalinskaya. . . . .	16 19
Mechanism and Kinetics of Chlorination of Titanium Dioxide in Fused Carnallite — A. B. Bezukladnikov. . . . .	25 31
Influence of Certain Factors on the Causticization Rate and on the Chemical Composition of the Product Formed during Causticization of Alkaline Silicate Solutions by Magnesium Oxide — G. G. Martirosyan and G. O. Grigoryan. . . . .	30 36
Influence of Magnetic Treatment on Certain Properties of Solutions — M. F. Skalozubov, F. I. Kukoz, G. K. Chernov, V. I. Matsokin, N. P. Galvoronskaya, and I. A. Pridatko. . .	36 42
Viscosity of Salt Melts in the System KCl - NaCl - CaCl <sub>2</sub> - MgCl <sub>2</sub> with the Weight Ratio KCl:NaCl = 8:1 — A. A. Maurits . . . . .	41 48
Electrical Conductivity of Solutions in the Ternary System H <sub>2</sub> SO <sub>4</sub> - H <sub>3</sub> PO <sub>4</sub> - H <sub>2</sub> O — V. P. Mashovets and V. I. Vladimirova . . . . .	47 55
Electrical Conductivity and Microhardness of Glasses in the Arsenic - Phosphorus - Selenium System — Z. U. Borisova and L. A. Krylova . . . . .	52 61
Heat Transfer to a Falling Liquid Film Previously Heated to the Boiling Point — I. V. Domanskii and V. N. Sokolov . . . . .	56 66
Extraction of Zinc Ions from Industrial Waste Waters — L. D. Skrylev and S. G. Mokrushin. .	61 72
Mechanism of the Poisoning Action of Zincate on the Reversible Nickel Oxide Electrode — V. N. Flerov. . . . .	65 76
Equilibrium in the Systems Ca + 2NaCl ⇌ CaCl <sub>2</sub> + 2Na and Mg + 2NaCl ⇌ MgCl <sub>2</sub> + 2Na on Dilution of the Metallic Phase with Lead — F. I. L'vovich, A. G. Morachevskii, and S. A. Zaretskii . . . . .	71 83
Influence of Iodide Ions on the Anodic Behavior of Cobalt in Sulfate Solutions — Ya. D. Zytner and A. L. Rotinyan. . . . .	76 89
Corrosion Resistance of Titanium in Hydrochloric Acid in Presence of Oxidizing Agents — E. V. Konstantinova and S. I. Spektor. . . . .	83 97
Extraction of Vanadium (V) by a Quaternary Ammonium Base with a Benzyl Group — V. S. Ul'yanov, R. A. Sviridova, and B. N. Laskorin. . . . .	87 102
Catalytic Oxidation of Isobutylene to Methylacrolein — A. G. Polkovnikova, L. A. Ivanova, L. L. Tseitina, and A. N. Shatalova. . . . .	99 106

(Contd.)

Available from Consultants Bureau

Investigation of the Adsorption of Mixtures of Dibasic Acids on Activated Carbon — V. A. Proskuryakov, G. M. Belotserkovskii, and N. A. Emel'yanova. . . . .	94	109
Reduction of Shale Acids by Lithium Aluminum Hydride — V. V. Gromova, V. A. Proskuryakov, and V. I. Yakovlev . . . . .	98	114
Mechanism of Methyl Methacrylate Synthesis — E. N. Zil'berman and A. A. Michurin . . . . .	106	122
Composition of the Liquid By-products Formed during Vapor-Phase Hydration of Acetylene to Acetaldehyde on Cadmium Calcium Phosphate Catalyst — N. A. Rozenberg, Yu. A. Gorin, and A. V. Koroleva . . . . .	112	128
Structure of Fiber Surface Layers — G. V. Nikonovich, N. D. Burkhanova, and Kh. U. Usmanov. . . . .	117	133
Action of Amines on Hydrate Cellulose Fibers — N. I. Klenkova, N. A. Matveeva, and L. A. Volkova . . . . .	121	138
Determination of the Solubility of Hydrogen Chloride in Triethoxysilane — A. S. Gorsikov, M. S. Reibakh, and A. M. Tsirlin. . . . .	131	151
Copolymers of Vinylene Carbonate with Vinyl Acetate — N. I. Duvakina, T. V. Kreitsler, and L. E. Klubikova . . . . .	136	155
Reaction of Mono-n-butyl Maleate with Metallic Iron — A. Kh. Uzbekova and A. M. Frost. . . . .	140	160
Synthesis and Hydrolysis of Glycosylureas — N. G. Shkantova, M. S. Dudkin, and S. I. Grinshpun . . . . .	144	164
Synthesis of Cellulose Phosphites by Ester Interchange with Dimethyl Phosphite, and Their Subsequent Conversions — D. A. Predvoditelev, M. A. Tyuganova, E. E. Nifant'ev, and Z. A. Rogovin . . . . .	150	171
Separation Coefficients in the System Indium Trichloride-Silicon Tetrachloride — Yu. V. Wittenberg, I. L. Kuchinskaya, and E. A. Krasnaya . . . . .	156	174
Properties of Solutions in the System $Ba(NO_3)_2 - Ba(NO_3)_2 - H_2O$ at 25° — T. A. Andreeva, P. I. Protchenko, and S. S. Pozharskaya. . . . .	158	160
Electron-Microscopic Study of the Crystallization of Zirconium Enamels — V. V. Vargin, E. M. Milyukov, and V. S. Kheifets . . . . .	161	183
Kinetics of Absorption of Nitrogen Dioxide by Sulfuric-Nitric Acid Mixture. II — I. E. Ioshpa and A. A. Belkin. . . . .	166	187
Determination of the Correction Factor in Conversion from Laboratory to Industrial Packing Elements for Absorption of Nitrogen Dioxide by a Mixture of Nitric and Sulfuric Acids. III — I. E. Ioshpa and V. P. Krivonogov . . . . .	169	189
Protection of Brass against Corrosion by Alloying with Arsenic — A. V. Shreider. . . . .	171	190
Relation between $\Phi$ -Potentials and the Tendency of Metals to Corrosion Cracking in Ammoniacal Solutions — A. V. Shreider. . . . .	175	193
Investigation of the Rate of Aluminum Loss in Cryolite-Alumina Melts — O. P. Bersimenko and M. M. Vetyukov . . . . .	177	195
Equivalent Relation between the Cell and Diffusion Models of Longitudinal Mixing — V. V. Dil'man. . . . .	180	197
Calculation of the Crystallization Time of the Addition Compound of Glucose and Sodium Chloride — É. L. Glazkova. . . . .	182	190
Reaction of Hydrazine with Nickelous Hydroxide — V. A. Sharov and E. I. Krylov . . . . .	185	201
Infrared Spectra of Polyvinyl Alcohol Modified by Dimethyldichlorosilane — I. B. Klimenko, N. K. Podlesskaya, and N. G. Shekunov . . . . .	188	204
Study of the Kinetics of Phthalation of Acetylcellulose and the Viscosity of Acetylphthalyl- cellulose Solutions — M. Kh. Gluzman and R. G. Zaslavskaya . . . . .	191	206
Preparation of Phosphorus-Containing Nonflammable and Rotproof Polyvinyl Alcohol Fibers — N. M. Volgina, A. I. Mees, L. A. Vol'f, and E. E. Nifant'ev. . . . .	194	209
Oxidation of Pitch Tar by Atmospheric Oxygen in Aqueous Alkali — L. M. Titov and A. N. Chistyakov . . . . .	195	210
Polarographic Investigation of Pyridinecarboxylic Acids and Their N-Oxides — A. G. Pozdeeva and E. G. Novikov . . . . .	198	213
Polarographic Investigation of Nitro Derivatives of N-Oxides of Pyridine and Quinoline Bases — E. G. Novikov and A. G. Pozdeeva . . . . .	202	217

(Contd)

Available from Consultants Bureau

# CONTENTS

(continued)

	Engl./Russ.
Synthesis of Ethers in Presence of KU-2 Cation Exchange Resin — O. N. Karpov, R. M. Bystrova, and L. G. Fedosyuk . . . . .	204 219
Alkylation of 3,4-Xylenol by Certain Aliphatic, Alicyclic, and Aryl-Aliphatic Olefins in Presence of KU-2 Cation Exchange Resin. II — S. P. Starkov and L. V. Glushkova. . . . .	209 224
Use of Thin-Layer Chromatography for Analysis of Oxime-Amide Mixtures, $\epsilon$ -Caprolactam, and Substances Accompanying Their Preparation — N. G. Dzhurinskaya, V. P. Evdakov, L. S. Sarycheva, and M. S. Andreeva. . . . .	212 226
Pilot Plant for Production of Aromatic Chlorophosphines — R. K. Dybovskii and V. A. Rogozkin. . . . .	215 228
New Method for Preparation of Higher Methacrylate Esters by Esterification of Methacrylic Acid in Presence of KU-2 Cation Exchange Resin — V. I. Isagulyants and V. A. Trofimov . . . . .	219 232
Influence of Technological Parameters on the Formation Rate of Alkylchlorosilanes — R. S. Fraiman and T. I. Luzanova . . . . .	223 235
Composition of the Chlorination Products of n-Butylenes — V. M. Kostyuchenko, A. I. Gershenovich, and L. A. Tkacheva . . . . .	227 238
Thermodynamics of Cyanamide Synthesis — G. A. Isayan, I. F. Buchnev, and Zh. M. Gasparyan. . . . .	230 240
Synthesis of tert-Butyl Peracetate from Acetate Anhydride and tert-Butyl Hydroperoxide in Presence of Acid Catalysts — V. L. Antonovskii and O. K. Lyashenko . . . . .	233 243
BOOK REVIEWS	
V. G. Zhuravkov. Organic Chemistry — Reviewed by I. G. Filatov . . . . .	234 244
G. V. Samsonov (ed.). Physicochemical Properties of the Elements (Data Book) — Reviewed by I. G. Filatov . . . . .	236 245
Dr. Marta Deri. Ferroelectric Ceramics — Reviewed by A. I. Avgustinik. . . . .	239 248

The Russian press date (podpisano k pechatii) of this issue was 1/7/1967.  
 Publication therefore did not occur prior to this date, but must be assumed  
 to have taken place reasonably soon thereafter.

Available from Consultants Bureau

# INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover tables of contents.

## - A -

Abakumov, V. A.	7	Birulya, Ye.	4
'Abd Allah, Isma'il		Boboc, A.	41
Sabri	15	Bock, R.	29
Abdurakhmanov, A.	3	Bockholt, B.	29
Abramzov, L. S.	43	Bogat, Yevgeniy	8
Akhmedov, S.	2	Bogolyubov, V.	4
al-Manaf, Jamil Kazim	16	Bogorov, V. G.	3
Alpsten, G.	38	Bogulyubov, N. N.	42
Aminov, S.	2	Bollenrath, F.	36
Andreyev, V.	6	Borodkin, A.	2
Anghelescu, V.	22	Bosnjak, Branko	12
Anselin, F.	42	Brown, G.	31
Antropov, V. P.	32	Buevich, Yu. A.	42
Arendaruk, A. P.	27	Buhler, H.	35
Arif, Mahmud	16	Bulychev, V. P.	28
Arkhipov, A. V.	3	Bumakova, S.	9
Arsenev, V. A.	4	Burdzinski, Z.	40
Artemov, N. M.	25	Burgov, V. A.	40
Avdenin, N. A.	43		

## - B -

Back, H.	36	Cabrera, Luis Rolando	20
Backus, Ducato J. A.	27	Carpentier, Alejo	20
Baltabayev, G. M.	9	Castro, R.	34
Baral, A. A.	24	Ch'en Ch'ien,	21
Barata, Jose Nunes	15	Ch'eng Hsiao-p'ing,	21
Barbashova, Z. I.	22	Chernyshev, V. O.	31
Barbirek, Frantizek	12	Chernyshev, Yu. O.	31
Barets, Andre	26	Chesnokova, G. D.	23
Baron, C.	25	Chestnoi, V. N.	39
Bastien, P.	34	Chi Ko-Chao,	17
Beklemishev, K. V.	22	Chi Yi-chai,	17
Belkin, A. N.	23	Chogovadze, G.	2
Belyayev, G. M.	29	Chugunova, N. I.	25
Belyayeva, G. K.	28	Chuiko, A. V.	39
Belykh, A. K.	9	Cirillo, M.	37
Berri, L. Ya.	7	Claro, R.	23
Bertulle, Victor H.	27	Colombo, E.	37
Betti, S.	37	Constantinescu, E.	31
Beyzer, P.	1	Cordova-Claure, Ted	20
Bezdenzhnykh, A. G.	31	Csendes, Bela	10
Biagi, Enzo	9	Cubillas, Vicente	19
Biarnes, Pierre	15	Cukanovic, Savo	12
Biesheuvel, A. C.	34		
Binenfeld, Zlatko	25		

## - C -

## - D -

Dabaajants, Ts.	21
Damergi, Jalel	14

Danilevich, L. A.	41
Dascalescu, Romeo	13
Davidenko, N.	40
de Cadenet, J. J.	34
Deich, A. Ya.	27
de Jong, J. J.	34
del Cueto, Mario G.	20
Delektorskiy, N. V.	3
Delessard, S.	34
Demina, N. V.	32
Dethloff, Kurt	22
Dibner, V. D.	29
di Guntane, Don	15
Djinic, Milorad	12
Do Chinh,	18
Doan Dinh Hoe,	31
Dolgiy, M.	2
Dolgu, Gh.	11
Dominova, S. R.	27
Domurat, J.	27
Donskov, S. V.	43
Dorf, G. A.	30
Douillet, D.	34
Dousset, M.	26
Dovgan', Ye. G.	23
Drogichenskiy, N.	3
Drogichinskiy, N.	1
Drut, I.	6
Druzhinin, N.	7
Duc Nghia,	18
Duong Hong Hien,	21
Durmala, Z.	38
Dvinyaninov, B. L.	29
D'yakov, V.	1

- E -

Efimenko, G. G.	32
Ehrlich, Wolf	16
Elisavetskaya, I. V.	33
Elokh, A. G.	43
Ene, Haralambie	11
Engel'gardt, Vladimir	23
Ermolayev, A. M.	32
Eshkol, Yosef	16
Esser, F.	35

- F -

Fadl, Muberak 'Abdu	16
Faminskiy, P. P.	7
Fayerman, Ye. Yu.	8
Fedorenko, N. P.	7, 30
Fedorenko, Nikolay	
Prokof'yevich	2

Fedotov, A. Ya.	30
Feher, Lajos	10
Feldman, D.	31
Ferarini, M.	22
Ferrer, Manuel	20
Fiala, Zofia	11
Filippov, B. N.	42
Fischer, I. Z.	43
Fokin, M. N.	38
Fontaine, G.	43
Frid, Zlatko	12
Friss, Istvan	11
Frobrodt, K.	39
Fullani, Jani	9

- G -

Gagarin, Yu. F.	41
Gak, I.	1
Garntsev, F. S.	6
Garry, Robert	18
Gavrilov, F. F.	29
Gay, Michel	40
Gedberg, M. G.	33
Genes, V. S.	23
Genri, Ernst	8
Gerl, Maurice	42
Gevenois, E.	29
Ghanim, 'Adil Hafiz	15
Gil'debrand, E. I.	28
Gladilin, K. L.	24
Glazov, V. M.	43
Gluszczyk, R.	11
Golovin, V. M.	43
Golubev, M.	9
Golubtsova, R. R.	32
Gonor, A. L.	42
Gonzalez, Gilberto	20
Goranskiy, G.	30
Goryaga, G. I.	42
Grechukhin, V.	2
Grevier, P.	34
Grioli, Giuseppe	44
Gudy, Z. Ye.	8
Guevara, Juan Liendo	20
Guitton, J.	34
Gulyayev, A. P.	33
Gun'ko, A. F.	8
Gupalo, Tu. P.	42
Guradzyan, G. A.	21
Gurevich, A. M.	33, 43
Gusarov, A.	2
Gyori, Mihaly	10

- H -

Hache, A.	34
Harms, F.	39
Hashimoto, Y.	26
Hegedus, Andras	44
Heiderpriem, J.	39
Hempel, Gotthilf	26
Henry, J. F.	29
Heumann, Theo	36
Hogman, O.	11
Holt, Dumitru	11
Holzhey, J.	39
Hornbogen, E.	36
Hummitzsch, W.	36
Hussain, 'Adil	16
Huu Tho,	18

- I -

Igishev, V. G.	33
Ihara, S.	37
Ingerman, M.	1
Ioanin, D.	41
Ionescu, G.	11
Iordanskiy, Vl.	17
Isac, Gabriel	41
Ito, T.	37
Ivanoa, Vera	9
Ivanov, A.	2
Ivanov, E. G.	32
Ivanov, I. I.	24
Ivanova, N. S.	41
Ivanovich, Yakovlev	
Mikhail	18
Ivasik, V. M.	22

- J -

Janecek, Otto	16
Janiche, W.	34
Janocszky, I.	26
Jarema, Bohdan	11
Jaschnov, W. A.	25
Jezeek, J.	38

- K -

Kabanov, B. N.	29
Kachina, T. F.	24
Kadaner, L. I.	34
Kadyshev, L.	1
Kaimakov, A. A.	31
Kaiganova, O. P.	33

Kamentsev, V. M.	5
Kanevskaya, E. A.	33
Karapetyan, A.	6
Karljikovic, Dusan	12
Kartsev, I.	9
Kasan, Jan	10
Kasatkin, F. V.	3
Katashinskiy, V. P.	38
Katsenelinboygen, A. I.	8
Kavalenko, I.	9
Kazakova, M. V.	32
Kaziwara, N.	40
Kersner, V.	7
Kessle, A. R.	42
Kesternich, W.	35
Kevdin, V. A.	7
Khalturin, D. K.	5
Khalvashi, Kh.	3
Khankal'yan, V.	4
Khar'kova, G. V.	43
Khlynov, N.	1
Kholodov, A. I.	32
Kholyavenko, K. M.	28
Kidin, I. N.	32
Kieffer, R.	36
Kilimonova, K. V.	4
Kipper, Z. M.	7
Kizevetter, I. V.	5
Klesment, I.	27
Klopfer, Heinz	10
Kluth, K. H.	36
Kobozev, N. K.	22
Kogan, I. M.	22
Kokorev, A. I.	42
Kolodina, I. S.	27
Komarek, Valtr	19
Komarov, L. I.	43
Kon'kov, A. S.	39
Konobeyevskiy, S. T.	41
Konstantinov, K. G.	25
Koopmans, T.	44
Kopineck, H. J.	36
Koreshekov, P.	1
Korobitsin, A. A.	38
Korobkov, A. F.	8
Korobkov, I.	3
Koto, H.	26
Kovalenko, I.	1
Kozin, N. I.	28
Krasin, A. K.	41
Kroneis, M.	34, 35
Kropacheva, A. A.	28
Kruchkovich, G. I.	43
Krumbiegel, D.	20



Kryanin, I. R.	33
Kryukova, T. A.	28, 29
Kudo, H.	37
Kudrashev, L. I.	43
Kudrna, R.	34
Kugushev, I. N.	1
Kuhlmann, A.	31
Kukhtenko, A. I.	31
Kuzin, M. I.	22
Kuznetsov, A. L.	43
Kuznetsova, V. N.	34
Kvurt, O. S.	28

- L -

Laba, L.	26
Laborit, H.	25
Laborit, P.	25
Lageda, E.	27
Lagutkin, V. M.	2
Lahti, Stig	14
Lajciak, Milan	13
Lalebret, Rafeal	
Sanchez	19
Lanskaya, K. A.	39
Lashko, N. F.	32
Laurent, Etinne	20
Lechowicz, Wlodzimierz	13, 14
Lee Chi-chen,	21
Leizerovich, Kh. A.	5
Letunov, V.	3
Levshin, G. F.	39
Li Ch'i-ch'en,	21
Libhard, Janina	11
Leineweg, F.	35
Lin Ch'en,	17
Lin Ch'ih-chang	21
Lipatov, D.	24
Liventsev, N. M.	22
Llanos, Marcos	20
Lovas, Marton	10
Lubitch, Ruth	16
Luong Nhan,	18
Lux, B.	35
Lyutov, At.	9

- M -

Ma, Il-ho	18
Maeda, T.	26
Majdic, A.	36
Makaveev, Nikola	13
Makhanek, N. G.	32
Maksakov, L. S.	40
Malevanchik, B.S.	5
Malinowski, Roman	11
Malyshev, A.	38
Malyutin, B. S.	24
Mamonov, Ye.	41
Maneschi, S.	37
Manescu, Manca	11
Manteyfel', B. P.	29
Marov, O. I.	4
Martin, Miguel	19
Maslennikov, V. V.	29
Masoero, P.	27
Maspero, Francois	20
Massanyi, Karoly	37
Matsko, S. N.	23
Maulnier, Thierry	16
Maurer, W.	40
Mazanov, K.	2
Mazzanti, M.	37
Mbungu, Joseph	15
Mechali, D.	26
Medovar, B. I.	32
Melnikov, A. V.	30
Mel'nikov, N. V.	30
Menne, H.	36
Metelitsa, V.	23
Meyer, H. J.	35
Meyer, Herbert	10
Meyer, L.	37
Michel, S.	11
Mikhaylin, V.	41
Mikhaylov, V.	7
Mikhlina, Ye. Ye.	28
Milyukov, A.	6
Mirkin, I. L.	33
Mirsch, Siegfried	10
Nisiak, Marek	11
Mitri, C.	37
Mod, Aladar	44
Mohacsy, Laszlo	10
Mohr, H.	26
Mohr, W.	39
Molkhov, Ya.	13
Moravec, Z.	33
Moskalenko, K. S.	8
Moskalenko, M. P.	5
Mototsugu Hamabe	26

Motz, J.	35
Movchan, A. A.	44
Mukaibo, T.	37
Mukhamed-Nagarova, O. M.	32
Mukhin, A. I.	25
Muller, P.	44
Munster, A.	42
Muratov, N.	6
Muromtsev, G. S.	22

- N -

Nam Van	17
Napf, G.	35
Naumenko, Yu. I.	25
Naumov, N. P.	25
Naumov, V. M.	8
Nehring, Dietwart	26
Neifakh, A. A.	25
Nekrasov, N. N.	7
Nezhnyy, A.	9
Ngoc, The	21
Nguyen Khac Vien	19
Nguyen Van Huyen	18
Nguyen Van Tien	18
Nguyen Van Tran	18
Nickel, E. G.	36
Nickolai, G.	35
Noda, G.	6
Novikov, I. I.	33
Novikov, Yu. V.	29
Novozhilov, E. P.	5
Novozhilov, Yu. N.	38
Nurideany, J.	26
Nyul, Emil	11

- O -

Oda, M.	40
Odinets, E. A.	5
Okaichi, T.	26
Oliv, A. A.	4
Onorin, O. P.	32
Orlov, Yu.	24
Osipov, A. I.	43
Os'kin, P.	3

- P -

Paminskiy, P. P.	7
Panina, G. K.	23
Parin, N. V.	25
Pasolini, L.	37

Pavlova, F. S.	34
Pavlova, G. A.	30
Peissker, Eberhard	40
Perepelitsa, V. K.	33
Perevedentsev, V.	8
Perov, G. V.	7
Pertsev, A. A.	30
Pervin, I. B.	9
Petrishchev, N. A.	4
Petrov, I. P.	29
Pham Cuong	19
Pham Ke	17
Pham Ngoc Thach	27
Phan Dien	19
Pham Khne	18
Phan Quang	21
Pigulevskiy, V. V.	29
Piskarev, A. I.	5
Podlesnyi, A. V.	5
Polukhin, V. P.	32
Polyakov, M. M.	29
Ponomarenko, I. Ya.	25
Popescu, Florica	13
Popov, I.	21
Popov, I. K.	31
Popov, L. A.	24
Popov, V. F.	27
Pospisil, Jaromir	44
Pozdniakov, J. F.	22
Primbsch, E.	40
Prokhorov, A.	8
Prokhorov, V. G.	24
Proshin, A. P.	39
Pruidze, R.	7
Pshonik, L.	6
Pukhnachev, V. V.	41

- R -

Radin, M.	13
Raineshova, J.	38
Rakous, Dalibor	10
Rass, T. S.	3
Razumov, O. S.	29
Regel', A. R.	43
Regirer, S. A.	33
Rehbein, G.	41
Revinskiy, B. M.	43
Richard, Pierre	29
Riecke, E.	35
Rimashevskaya, N.	6
Rinesch, R. F.	35
Risse, W.	40
Rochet, Waldeck	13, 14
Roes, H. L.	35

Rolovic, Dusan	13
Romanov, G. A.	28
Romert, V.	31
Rossanda, Rossana	19
Rostarchuk, M.	29
Roter, Zdenko	12
Rubanik, M. Ya.	28
Rulea, George	13
Ruz, Ramon Castro	19
Rytvinskaya, M. S.	9

- S -

Sachuk, N. N.	8
Sagel, K.	42
Sagoyan, L. N.	31
Sajo, I.	36
Samarin, A. A.	33
Sanders, A. F.	40
Savichev, G. A.	8
Savin, G. N.	43
Sazonov, N. V.	28
Scharf, G.	35
Schenck, H.	34, 36
Schmidt, U.	10
Schurmann, E.	36
Schwarzlose, J.	39
Sedlachek, B.	28
Seehars, H. D.	21
Selivanov, A. I.	20
Semenenko, V. E.	24
Serebryanyi, S. B.	28
Serova, G. F.	29
Severny, A. B.	21
Sharoyko, S. A.	41
Shaykh, Riyad	15
Shcherbakov, A.	7
Shevchenko, K. N.	39
Shishkin, R. G.	1
Shishkina, O. V.	30
Shleysner, R.	31
Shlimovich, B.	6
Shmakov, N. M.	3
Shprintsint, V. N.	7
Shramko, Yu. P.	40
Shreiber, G. K.	32
Shuba, M. F.	22
Shumakov, V. I.	23
Shvartsev, L. I.	33
Sibirtsev, G. G.	4
Sidorenko, A. V.	30
Simonyan, G. A.	30
Simuni, L. M.	42
Sinani, Paskal	9
Skoldinov, A. P.	27

Skorupskiy, V.	5
Skovorodnikov, Yu. A.	42
Skvorchuk, V. P.	43
Slizkov, V.	31
Smiryagin, A. P.	28
Solokov, O. B.	42
Solov'yev, A. N.	33
Solov'yev, V. G.	41
Soltynaski, A.	40
Son, P.	37
Sorokin, V. A.	38
Sosnovets, E. N.	43
Spinov, V. A.	39
Stachorski, Gerhard	10
Stanoev, Dimitur	12
Starodubov, K. F.	32
Starovoytenko, I.	2
Stepukhovich, A. D.	33
Stoilov, Stefan	10
Storozhuk, Ya. P.	33
Stupochenko, Ye. V.	43
Sulyayeva, L.	1
Sushchenya, L. M.	23
Buvaov, B. V.	27
Suvar, Stipe	13
Suzuki Tanero	26
Sysoyev, N. P.	4
Szigeti, Jozsef	12

- T -

Taranov, A.	5
Tarusov, B. N.	24
Thelamon-Meynard, C.	29
Tikhomirova, G.	24
Timofeyev, Yu.	8
Toca, Evelio Telleria	19
Todorovic, M.	12
Tolstykh, N.	8
Tran Huong Duong	18
Trofimov, V. P.	6
Tromel, G.	36
Troost, A.	34
Tsmel', V.	2
Tsuchiya, O.	30
Tudoran, C.	11
Tula, Albert	14
Tumanovskiy, M. N.	23
Tur'yan, Ya. I.	29
Tyurina, A. P.	4

- U -

Uchiyama Hitoshi	26
Ushakov, P. V.	29

Vaindiner, A. I.	38
Valignat, J.	34
Val'ter, L. Ya.	6
Valuyev, B.	2
van der Feer, Y.	42
Van Ngoc	17
Vasil'yev, A.	9
Vatakhin, A. B.	33
Vater, M.	36
Vazquez, Jose	19
Vdovenko, V. M.	28
Vekshin, V. D.	31
Veselov, M. G.	28
Vetlov, I.	44
Vetrovec, K.	33
Videkov, Khr.	41
Viktorova, L.	8
Vil'bik, Z.	2
Vinogradov, G. A.	38,39
Voinov, B. A.	33
Voith, M.	37
Vol'fson, T. I.	23
Volynskiy, Z. M.	23
Vorob'yev, I. N.	8
Vorob'yev, V. I.	25
Vorob'yeva, V. Ya.	28
Voronkov, M. G.	27
Vorontsov, D. S.	22
Vorotnikev, G. S.	43
Voyevodina, O. Ye.	23
Vu Trong Nam	17
Vukov, Josko	12
Vuks, M. F.	28
Vyalov, S. S.	38
Vyskrobentsev, V. K.	30

- W -

Wada, M.	30
Wallquist, G.	38
Warynski, G.	39
Washimi, R.	40
Weber, H.	25
Weimar, G.	35
Weinreich, W.	36
Wilkens, M.	36
Willert, H.	36
Wirtsch, G.	10
Wust, Georg	30

- Y -

Yao Ch'en-sheng	21
Yarzemskaya, E. Ya.	29
Yelizarov, A. A.	29

Yesod, M.	41
Yotov, Polkovnik Iv	25
Yurenkov, V. D.	30

- Z -

Zabirov, B.	15
Zabiyakin, G. I.	30
Zakharov, A. B.	33
Zakharov, S. N.	30
Zakruzhnyy, A.	3
Zamfirescu, Nicolae	11
Zarin, N. A.	4
Zavodnov, S. S.	27
Zemlyanoy, I.	1
Zemlyanskiy, G. I.	38
Zemlyanskiy, M.	3
Zhadan, T. A.	33
Zhikharev, P.	1
Zhukov, N.	22
Zilanov, V. K.	24
Zonshayn, S. I.	20
Zubarev, B. I.	7

\*\*\*

UNCLASSIFIED  
Central Intelligence Agency



Washington, D.C. 20505

7 September 2004

Ms. Roberta Schoen  
Deputy Director for Operations  
Defense Technical Information Center  
7725 John J. Kingman Road  
Suite 0944  
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sergio N. Alcivar".

Sergio N. Alcivar  
Chief, CIA Declassification Center,  
Declassification Review and Referral  
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)

UNCLASSIFIED

ENCLOSURE I



## Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed  
by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Plat	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0482732	78-03109A	56	1	5	100	Consolidated Translation Survey For April 1966	4/1/1966	203	Approved For Release	3/25/2004
AD0485874	78-03109A	56	1	6	101	Consolidated Translation Survey For May 1966	5/1/1966	250	Approved For Release	3/25/2004
AD0486759	78-03109A	56	1	7	102	Consolidated Translation Survey For June 1966	6/1/1966	265	Approved For Release	3/25/2004
AD0488131	78-03109A	56	1	8	103	Consolidated Translation Survey For July 1966	7/1/1966	178	Approved For Release	3/25/2004
AD0800235	78-03109A	57	1	1	104	Consolidated Translation Survey For August 1966	8/1/1966	264	Approved For Release	3/25/2004
AD0801439	78-03109A	57	1	2	105	Consolidated Translation Survey For September 1966	9/1/1966	211	Approved For Release	3/25/2004
AD0803607	78-03109A	57	1	3	106	Consolidated Translation Survey For October 1966	10/1/1966	247	Approved For Release	3/25/2004
AD0804982	78-03109A	57	1	4	107	Consolidated Translation Survey For November 1966	11/1/1966	203	Approved For Release	3/25/2004
AD0806465	78-03109A	57	1	5	108	Consolidated Translation Survey For December 1966	12/1/1966	234	Approved For Release	3/25/2004
AD0808740	78-03109A	57	1	6	109	Consolidated Translation Survey For January 1967	1/1/1967	277	Approved For Release	3/25/2004
AD0811456	78-03109A	57	1	7	110	Consolidated Translation Survey For February 1967	2/1/1967	234	Approved For Release	3/25/2004
AD0813563	78-03109A	57	1	8	111	Consolidated Translation Survey For March 1967	3/1/1967	342	Approved For Release	3/25/2004
AD0814969	78-03109A	57	1	9	112	Consolidated Translation Survey For April 1967	4/1/1967	268	Approved For Release	3/25/2004
AD0816126	78-03109A	58	1	1	113	Consolidated Translation Survey Through 31 May 1967	5/31/1967	210	Approved For Release	3/25/2004
AD0818406	78-03109A	58	1	2	114	Consolidated Translation Survey Through 30 June 1967	6/30/1967	271	Approved For Release	3/25/2004
AD0834366	78-03109A	58	1	3	115	Consolidated Translation Survey Through 31 July 1967	7/31/1967	318	Approved For Release	3/25/2004
AD0820905	78-03109A	58	1	4	116	Consolidated Translation Survey Through 31 August 1967	8/31/1967	308	Approved For Release	3/25/2004
AD0822924	78-03109A	58	1	5	117	Consolidated Translation Survey Through 30 September 1967	9/30/1967	330	Approved For Release	3/25/2004
AD0824515	78-03109A	58	1	6	118	Consolidated Translation Survey Through 31 October 1967	10/31/1967	200	Approved For Release	3/25/2004
AD0824581	78-03109A	58	1	7	119	Consolidated Translation Survey Through 30 November 1967	11/30/1967	194	Approved For Release	3/25/2004
AD0832430	78-03109A	58	1	8	120	Consolidated Translation Survey Through 31 December 1967	12/31/1967	100	Approved For Release	3/25/2004
AD0828154	78-03109A	58	1	9	121	Consolidated Translation Survey Through 31 January 1968	1/31/1968	221	Approved For Release	3/25/2004
AD0829939	78-03109A	59	1	1	122	Consolidated Translation Survey Through 29 February 1968	2/29/1968	246	Approved For Release	3/25/2004

Wednesday, August 25, 2004

Page 1 of 10